

SEQUENCE LISTING

<110> Wang, Tongtong
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 Bangur, Chaitanya S.
 Hosken, Nancy
 Fanger, Gary R.
 Li, Samuel X.
 Wang, Aijun
 Skeiky, Yasir A.W.
 Henderson, Robert A.
 McNeill, Patricia D.

<120> COMPOSITIONS AND METHODS FOR THE THERAPY
 AND DIAGNOSIS OF LUNG CANCER

<130> 210121.455C13

<140> US

<141> 2000-10-09

<160> 381

<170> FastSEQ for Windows Version 3.0

<210> 1

<211> 315

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(315)

<223> n = A,T,C or G

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ttcatctcca gcagagacaa cggaggaggc tcccaccagg acggttctca ttatttat	180
gttaatatgt ttgtaaactc atgtacagtt ttttttgggg gggaagcaat gggaangta	240
naaattacaa atagaatcat ttgctgtaat ccttaaattg caaacggtca ggccacgtga	300
aaaaaaaaaaaa	315

<210> 2

<211> 380

<212> DNA

<213> Homo sapien

<400> 2

atttaggctt aagattttgt ttacccttgt tactaaggag caaattagta ttaaagtata	60
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atatatataa acaaatacaa aaagttttga gtggttcagc ttttttattt tttttaatgg 120
cataactttt aacaacactg ctctgtaatg ggttgaactg tgggtactcag actgagataa 180
ctgaaatgag tggatgtata gtgttattgc ataattatcc cactatgaag caaagggact 240
ggataaattc ccagtctaga ttattagcct ttgttaacca tcaagcacct agaagaagaa 300
ttattggaaa ttttgcctc tgtaactggc actttggggg gtgacttatc ttttgccttt 360
gtaaaaaaaa aaaaaaaaaa 380

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<210> 3
<211> 346
<212> DNA
<213> Homo sapien

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<220>
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<223> n = A,T,C or G

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<400> 3
ttgtaagtat acaatttttag aaaggattaa atgttattga tcattttact gaatactgca 60
catcctcacc atacaccatc cactttccaa taacatttaa tcctttctaa aattgtaagt 120
atacaattgt actttctttg gattttcata acaaatacac catagactgt taattttatt 180
gaagtttcct taatggaatg agtcattttt gtcttggtgct tttgaggta cctttgcttt 240
gacttccaac aatttgatca tatagtgttg agctgtggaa atctttaagt ttattctata 300
gcaataattt ctattnnnag annccngggn naaaannann annaaa 346

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<210> 4
<211> 372
<212> DNA
<213> Homo sapien

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<220>
<221> misc_feature
<222> (1)...(372)
<223> n = A,T,C or G

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<400> 4
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tctcttctcc aagttgtgct ttgtggggac aatcattctt tgaacattag agaggaaggc 180
agttcaagct gttgaaaaga ctattgctta tttttgtttt taaagaccta cttgacgtca 240
tgtggacagt gcacgtgcct tacgctacat cttgttttct aggaagaagg ggatgcnggg 300
aaggantggg tgctttgtga tggataaaac gnctaaataa cacaccttta cattttgaaa 360
aaaacaaaac aa 372

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<210> 5
<211> 698
<212> DNA
<213> Homo sapien

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<220>
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<222> (1)...(698)
<223> n = A,T,C or G

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120 180 240 300 360 380 60 120 180 240 300 346 60 120 180 240 300 360 372

<400> 5

actagtanga tagaaacact	gtgtcccag	agtaaggaga	gaagctacta	ttgattagag	60
cctaaccag gttaactgca	agaagaggcg	ggatactttc	agctttccat	gtaactgtat	120
gcataaagcc aatgtagtcc	agtttctaag	atcatgttcc	aagctaactg	aatcccactt	180
caatacacac tcatgaactc	ctgatggaac	aataacaggc	ccaagcctgt	ggtatgatgt	240
gcacacttgc tagactcaga	aaaaatacta	ctctcataaa	tgggtgggag	tattttgggt	300
gacaacctac tttgcttggc	tgagtgaagg	aatgatattc	atatnttcat	ttattccatg	360
gacatttagt tagtgctttt	tatataccag	gcagtatgct	gagtgacact	cttgtgtata	420
tntccaaatn ttngtncngt	cgctgcacat	atctgaaatc	ctatattaag	antttcccaa	480
natgangtcc ctggtttttc	cacgccactt	gacngtcaa	ngatctcacc	tctgtntgtc	540
ctaaaacnt ctncnnnang	gtagaang	acctctcttc	tcccttcccg	aanaatnaag	600
tgtgngaaga nanccnncn	ccccctnnc	tncnncctng	ccngctnnnc	cncntgtngg	660
ggngccgcc cccgcggggg	gaccccccn	ttttcccc			680

<210> 6

<211> 740

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(740)

<223> n = A,T,C or G

<400> 6

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catgtttatc ttttattatg	tnttgtgaag	ttgtgtcttt	tcactaatta	cctatactat	120
gccaatattt ccttataatc	atccataaca	tttatactac	atttgaaga	gaatatgcac	180
gtgaaactta acactttata	aggtaaaaa	gagggtttcca	agatttaata	atctgatcaa	240
gttcttgtta tttccaaata	gaatggactt	ggtctgttaa	ggggctaagg	gagaagaaga	300
agataagggt aaaagtgtt	aatgaccaa	cattctaaaa	gaaatgcaa	aaaaaattta	360
ttttcaagcc ttcgaactat	ttaaggaaag	caaaatcatt	tcctanatgc	atatcatttg	420
tgagantttc tcantaatat	cctgaatcat	tcatttcagc	tnaggcttca	tgttgactcg	480
atatgtcatc tagggaaagt	ctatttcatg	gtccaaacct	gttgccatag	ttggttnaggc	540
tttcctttaa ntgtgaanta	tnacangaa	attttctctt	tnanagttct	tnatagggtt	600
aggggtgtgg gaaaagcttc	taacaatctg	tagtgttncg	tgttatctgt	ncagaaccan	660
aatnacggat cgnangaagg	actgggtcta	tttacangaa	cgaatnatct	ngttnnntgt	720
gtnnncaact ccngggagcc					740

<210> 7

<211> 670

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(670)

<223> n = A,T,C or G

<400> 7

gctggggagc tcggcatggc	ggtccccgct	gcagccatgg	ggccctcggc	ggtggggcag	60
agcgggcccg gctcgatggc	cccgtgggtgc	tcagtgaagc	gcggcccgtc	gcgctacgtg	120
cttgggatgc aggagctgtt	ccggggccac	agcaagaccg	cgagttcctg	gcgcacagcg	180
ccaagggtga ctcggtggcc	tggagttgcg	acgggcgtcg	cctacctcgg	ggtcttcgac	240

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aagacgccac gtcttcttgc tgganaanga ccgttggtca aagaaaacaa ttatcgggga 300
catggggata gtgtggacca ctttggtggc atccaagtaa tcctgacctt tttgttacgg 360
cgtctggaga taaaaccatt cgcactctgg atgtgaggac tacaaaatgc attgccactg 420
tgaacactaa aggggagAAC attaatatct gctggantcc tgatgggcan accattgctg 480
tagcnacaag gatgatgtgg tgactttatt gatgccaaga aaccccgctc caaagcaaaa 540
aaacanttcc aanttcgaag tcaccnaaat ctctggaac aatgaacatn aatatnttct 600
tcctgacaat ggncccttgg tgtntcacat cctcagctnc cccaaaactg aancctgtnc 660
natccacccc
670

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<210> 8
<211> 689
<212> DNA
<213> Homo sapien

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<220>
<221> misc_feature
<222> (1)...(689)
<223> n = A,T,C or G

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<400> 8
actagtatct aggaatgaac agtaaaagag gagcagttgg ctacttgatt acaacagagt 60
aatgaagta ctggatttgg gaaaacctgg ttttattaga acatatggaa tgaaagccta 120
cacctagcat tgcctactta gccccctgaa ttaacagagc ccaattgaga caaacccctg 180
gcaacaggaa attcaaggga gaaaaagtaa gcaacttggg ctaggatgag ctgactccct 240
tagagcaaag ganagacagc cccattacc aaataccatt tttgcctggg gcttgtgcag 300
ctggcagtg tcttgcacca gcatggcacc ttatngtttt gatagcaact tcggtgaatt 360
ttcaccaact tattacttga aattataata tagcctgtcc gtttgctgtn tccaggctgt 420
gatatatntt cctagtgtgt tgacttttaa aataaatnag gtttantttt ctccccccnn 480
cnntnctncc nntnctenn cnntcccccc cntcngtcc tccnnnttn gggtgggccc 540
ccccnccgn ggacccccct ttggtccctt agtgagggtt natggccctt ggnnttatcc 600
nggcctann tttccccgtt nnaaatgntt cccctccca ntccnccac ctcaanccgg 660
aagcctaagt ttntaccctg ggggtcccc 689

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<210> 9
<211> 674
<212> DNA
<213> Homo sapien

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<220>
<221> misc_feature
<222> (1)...(674)
<223> n = A,T,C or G

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<400> 9
gtccactctc ctttgagtgt actgtcttac tgtgcactct gtttttcaac tttctagata 60
taaaaaatgc ttgttctata gtggagtaag agctcacaca cccaaggcag caagataact 120
gaaaaaagcg aggtttttt gccaccttgg taaaggccag ttactgcta tagaactgct 180
ataagcctga agggaagtag ctatgagact ttccattttt cttagtctc ccaataggct 240
ccttcattga aaaaggcttc ctgtaataat tttcacctaa tgaattagca gtgtgattat 300
ttctgaaata agagacaaat tgggccgcag agtcttctct tgatttaaaa taaacaaccc 360
aaagttttgt ttggtcttca ccaaaggaca tactctaggg ggtatgttgt tgaagacatt 420
caaaaacatt agctgttctg tctttcaatt tcaagttatt ttggagactg cctccatgtg 480
agttaattac tttgctctgg aactagcatt attgtcatta tcatcacatt ctgtcatcat 540
catctgaata atattgtgga tttccccctc tgcttgcata ttcttttgac tcctctggga 600

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CCCTTCTTGC

anaaatgtca aaaaaaaagg tcgatctact cngcaaggnc catctaataca ctgcgctgga 660
aggaccnct gccc 674

<210> 10
<211> 346
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(346)
<223> n = A,T,C or G

<400> 10
actagtctgc tgatagaaag cactatacat cctattgttt ctttctttcc aaaatcagcc 60
ttctgtctgt aacaaaaatg tactttatag agatggagga aaaggtctaa tactacatag 120
ccttaagtgt ttctgtcatt gttcaagtgt attttctgta acagaaacat atttggaatg 180
tttttctttt ccccttataa attgtaattc ctgaaatact gctgctttaa aaagtccac 240
tgtcagatta tattatctaa caattgaata ttgtaaatat acttgtctta cctctcaata 300
aaagggtact tttctattan nnagnngnnn gnnnnataaa anaaaa 346

<210> 11
<211> 602
<212> DNA
<213> Homo sapien

<400> 11
actagtaaaa agcagcattg ccaaataatc cctaattttc cactaaaaat ataatgaaat 60
gatgttaagc tttttgaaaa gtttaggtta aacctactgt tgtagatta atgtatttgt 120
tgcttccctt tatctggaat gtggcattag cttttttatt ttaaccctct ttaattctta 180
ttcaattcca tgacttaagg ttggagagct aaacactggg atttttggat aacagactga 240
cagttttgca taattataat cggcattgta catagaaagg atatggctac cttttgttaa 300
atctgcactt tctaaatatc aaaaaaggga aatgaagtta taaatcaatt tttgtataat 360
ctgtttgaaa catgagtttt atttgcttaa tattagggct ttgccccttt tctgtaagtc 420
tcttgggata ctgtgtagaa ctgttctcat taaacacca acagttaagt ccattctctg 480
gtactagcta caaatccggt ttcataattc acttaacaat ttaaataaac tgaaatattt 540
ctagatggtc tacttctgtt catataaaaa caaaacttga tttccaaaaa aaaaaaaaaa 600
aa 602

<210> 12
<211> 685
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(685)
<223> n = A,T,C or G

<400> 12
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attatcatgg tattgatgga cctaagaaaa taaaaattag actaagcccc caaataagct 120
gcatgcattt gtaacatgat tagtagattt gaatatatag atgtagtatn ttgggtatct 180
aggtgtttta tcattatgta aaggaattaa agtaaaggac tttgtagttg tttttattaa 240

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atatgcatat agtagagtgc aaaaatatag caaaaatana aactaaaggt agaaaagcat 300
tttagatatg ccttaatnta nnaactgtgc caggtggccc tcggaataga tgccaggcag 360
agaccagtgc ctgggtggtg cctccccttg tctgcccccc tgaagaactt ccctcacgtg 420
angtagtgcc ctcgtaggtg tcacgtggan tantggganc aggccgnncn gtnanaagaa 480
ancanngtga nagtttcncc gtngangcng aactgtccct gngccnnnac gctcccanaa 540
cntntccaat ngacaatcga gtttcennnc tccngnaacc tngccgnnnn cnngcccnnc 600
cantntgnta accccgcgcc cggatcgctc tcnnntcggt ctncncnaa ngggntttcn 660
cnnccgcgct cncnnccccg cnncc 685

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<210> 13
<211> 694
<212> DNA
<213> Homo sapien

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<220>
<221> misc_feature
<222> (1)...(694)
<223> n = A,T,C or G

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<400> 13
cactagtcac tcattagcgt tttcaatagg gctcttaagt ccagtagatt acgggtagtc 60
agttgacgaa gatctggttt acaagaacta attaaatggt tcattgcatt tttgtaagaa 120
cagaataatt ttataaaatg tttgtagttt ataattgccg aaaataatth aaagacactt 180
tttctctgtg tgtgcaaatg tgtgtttgtg atccattttt tttttttttt taggacacct 240
gtttactagc tagctttaca atatgccaaa aaaggatttc tccctgaccc catccgtggt 300
tcaccctctt tcccccccat gctttttgcc ctagtattata acaaaggaat gatgatgatt 360
taaaaagtag ttctgtatct tcagtatctt ggtcttccag aaccctctgg ttgggaaggg 420
gatcattttt tactggtcat ttccctttgg agtgactact tttaacagat ggaaagaact 480
cattggccat ggaaacagcc gangtggttg gagccagcag tgcattggcac cgtccggcat 540
ctggcntgat tgggtctggct gccgtcattg tcagcacagt gccatgggac atggggaana 600
ctgactgcac ngccaatggt tttcatgaag aatacngcat ncnngtgat cacgtnancc 660
angacgctat gggggncana gggccanttg cttc 694

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<210> 14
<211> 679
<212> DNA
<213> Homo sapien

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<220>
<221> misc_feature
<222> (1)...(679)
<223> n = A,T,C or G

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<400> 14
cagccgcctg catctgtatc cagcgccang tcccgcaggt cccagctgcg cgcgcccccc 60
agtcccgnac ccgttcggcc cangctnagt tagncctcac catnccggtc aaaggangca 120
ccaagtgcac caaataacct cngtncggat ntaaattcat cttctggctt gccgggattg 180
ctgtccntgc cattggacta nggtccgat ncgactctca gaccanganc atcttcganc 240
naganactaa tnatnattnt tccagcttct acacaggagt ctatattctg atcgatccg 300
gencctctnt gatgctggtg ggcttctcta gctgctgcg ggctgtgcaa gattcccant 360
gcatgctggg actgttcttc ggcttctct tgggtgattn cgccattgaa atacctgcgg 420
ccatctgggg atattccact ncgatnatgt gattaaggaa ntccacggag ttttacaagg 480
acacgtacaa cnacctgaaa accnnggatg anccccaccg ggaancnctg aangccatcc 540
actatgcggt gaactgcaat ggtttggtg gggnccttga acaatttaat cncatacatc 600

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tggccccann aaaggacnln ctcganncct tcnccgtgna attcngttct gatnccatca 660
cagaagtctc gaacaatcc 679

<210> 15
<211> 695
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(695)
<223> n = A,T,C or G

<400> 15
actagtggat aaaggccagg gatgctgctc aacctcctac catgtacagg gacgtctccc 60
cattacaact acccaatccg aagtgtcaac tgtgtcagga ctaanaaacc ctgggttttga 120
ttaaaaaagg gcctgaaaaa aggggagcca caaatctgtc tgcttcctca cnttantcnt 180
tggcaaatna gcattctgtc tcnttggtg cngcctcanc ncaaaaaanc ngaactcnat 240
cnggccagg aatacatctc ncaatnaacn aaattganca aggcnntggg aaatgccnga 300
tgggattatc ntccgcttgt tgancctcta agtttcnttc ccttcattcn accctgccag 360
ccnagttctg ttagaaaaat gccngaattc naacnccggt tttcntactc ngaattttaga 420
tctncanaaa cttcctggcc acnattcnaa ttnanggnca cgnacanatn ccttccatna 480
ancncacccc acntttgana gccangacaa tgactgcntn aantgaaggc ntgaaggaan 540
aactttgaaa ggaaaaaaa ctttgtttcc ggcccccttc aacncttctg tgttnancac 600
tgctttctng naaccctgga agcccnngna cagtgttaca tgttgttcta nnaaacngac 660
ncttnaatnt cnatcttccc nanaacgatt ncnc 695

<210> 16
<211> 669
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(669)
<223> n = A,T,C or G

<400> 16
cgccgaagca gcagcgagg ttgtccccgt tccccctccc ccttcccttc tccggttgcc 60
tccccgggcc ccttacaact cacagtcccc gtccccgcat gtcccagaaa caagaagaag 120
agaaccctgc ggaggagacc ggcgaggaga agcaggacac gcaggagaaa gaaggtattc 180
tgcttgagag agctgaagag gcaaagctaa aggccaaata cccaagccta ggacaaaagc 240
ctggaggctc cgacttctc atgaagagac tccagaaagg gcaaaagtac tttgactcng 300
gagactacaa catggccaaa gccaacatga agaataagca gctgccaaagt gcangaccag 360
acaagaacct ggtgactggt gatcacatcc ccacccacac ggatctgccc agagaaaagtc 420
ctcgctcgtc accagcaagc ttgcgggtgg ccaagttgaa tgatgctgcc ggggctctgc 480
canatctgag acgcttccct ccctgcccc cccgggtcct gtgctggctc ctgcccttcc 540
tgcttttgca gccanggggc aggaagtggc ncnggtngtg gctggaaagc aaaacccttt 600
cctgttggtg tccccccat ggagccccctg gggcgagccc angaacttga ncctttttgt 660
tntcttncc 669

<210> 17
<211> 697
<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(697)

<223> n = A,T,C or G

<400> 17

gcaagatatg	gacaactaag	tgagaaggta	atnctctact	gctctagntn	ctccnggcnn	60
gacgcgctga	ggagannnac	gctggcccan	ctgccggcca	cacacgggga	tcntggtnat	120
gcctgcccan	gggancccca	ncnctcggan	cccatntcac	acccgnnccn	tncgcccacn	180
ncctggetcn	cnengcceng	nccagctenc	gnccccctcc	gccnnnctcn	ttnnctctc	240
cnncctctcc	ncnacnacct	cctaccencg	gctccctccc	cagccccccc	ccgcaancct	300
ccacnacncc	ntennencga	anencenctc	genctengcc	ccngccccct	gccccccgcc	360
cncnacnneg	cgntcccccg	cgcnegcngc	ctenccccct	cccacnacag	ncncacccgc	420
agncaagcnc	tccgcccnc	gacgcccenn	cccgcgcgcg	tcaccttcat	ggncnncng	480
ccccgctcnc	ncenctgcnc	gccgnennng	cgccccgcgc	cnnccgngtn	ccnccgngg	540
ccccgngcng	ancngtgcg	cnnccngncc	gngccgnncc	ncaccctccg	ncnccgcgcc	600
cgcccgctgg	gggctccgcg	cncgcggntc	antccccncc	cntnccgcca	ctntccgntc	660
cnnnctcnc	gtcngcgcn	cgcccnccnc	ccccccc			697

<210> 18

<211> 670

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(670)

<223> n = A,T,C or G

<400> 18

ctcgtgtgaa	gggtgcagta	cctaagccgg	agcggggtag	aggcggggccg	gcacccccctt	60
ctgacctcca	gtgccgcggg	cctcaagatc	agacatggcc	cagaacttga	acgacttggc	120
gggacggctg	cccgcggggc	cccggggcat	gggcacggcc	ctgaagctgt	tgctgggggc	180
cggcgcgctg	gcctacgggtg	tgcgcggaatc	tgtgttcacc	gtggaaggcg	ggcncagagc	240
catcttcttc	aatcggtatc	gtggagtgc	caggacacta	tcctggggccg	anggccttca	300
cttcaggatc	cttggttcca	gtaccccanc	atctatgaca	ttcggggccag	acctcgaaaa	360
aatctcctcc	ctacaggctc	caaagaccta	cagatgggtga	atatctccct	gcgagtgttg	420
tctcgaccaa	tgctcangaa	cttcctaaca	tgttccancg	cctaagggtc	ggactacnaa	480
gaacgantgt	tgccgtccat	tgctacgaag	tgctcaagaa	tttnggtggc	caagttcaat	540
gnectcacnn	ctgatcnccc	agcggggcca	agttanccct	ggttgatccc	cgggganctg	600
acnnaaaagg	gccaaggact	ccccctcatc	ctggataatg	tggccntcac	aaagctcaac	660
tttanccacc						670

<210> 19

<211> 606

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(606)

<223> n = A,T,C or G

<400> 19

actagtgcc	acctcagctc	ccaggccagt	tctctgaatg	tcgaggagtt	ccaggatctc	60
tggcctcagt	tgtccttggg	tattgatggg	ggacaaattg	gggatggcca	gagccccgag	120
tgtcgccctg	gctcaactgt	ggttgatttg	tctgtgcccc	gaaagtttgg	catcattcgt	180
ccaggctgtg	ccctggaaag	tactacagcc	atcctccaac	agaagtacgg	actgctcccc	240
tcacatgcgt	cctacctgtg	aaactctggg	aagcaggaag	gccaagacc	tggtgctgga	300
tactatgtgt	ctgtccactg	acgactgtca	aggcctcatt	tgcagaggcc	accggagcta	360
gggactagc	ctgactttta	aggcagtgtg	tctttctgag	cactgtagac	caagcccttg	420
gagctgctgg	tttagccttg	cacctgggga	aaggatgtat	ttatttgtat	tttcatatat	480
cagccaaaag	ctgaatggaa	aagttnagaa	cattcctagg	tggccttatt	ctaataagtt	540
tcttctgtct	gttttgtttt	tcaattgaaa	agttattaaa	taacagattt	agaatctagt	600
gagacc						606

<210> 20

<211> 449

<212> DNA

<213> Homo sapien

<400> 20

actagtaaac	aacagcagca	gaaacatcag	tatcagcagc	gtcgccagca	ggagaatatg	60
cagcgccaga	gccgaggaga	acccccgctc	cctgaggagg	acctgtccaa	actcttcaaa	120
ccaccacagc	cgctgccag	gatggactcg	ctgctcattg	caggccagat	aaacacttac	180
tgccagaaca	tcaaggagtt	cactgcccac	aacttaggca	agctcttcat	ggcccaggct	240
cttcaagaat	acaacaacta	agaaaaggaa	gtttccagaa	aagaagttaa	catgaactct	300
tgaagtcaca	ccagggcaac	tcttggaaga	aatatatttg	catattgaaa	agcacagagg	360
atttcttttag	tgtcattgcc	gattttggct	ataacagtgt	ctttctagcc	ataataaaat	420
aaaacaaaat	cttgactgct	tgctcaaaa				449

<210> 21

<211> 409

<212> DNA

<213> Homo sapien

<400> 21

tatcaatcaa	ctggtgaata	attaaacaat	gtgtggtgtg	atcatacaaa	gggtaccact	60
caatgataaa	aggaacaagc	tgcctatatg	tggacaaca	tggatgcatt	tcagaaactt	120
tatgtttgagt	gaaagaacaa	acacggagaa	catactatgt	ggttctcttt	atgtaacatt	180
acagaaataa	aaacagaggc	aaccaccttt	gaggcagtat	ggagtgagat	agactggaaa	240
aaggaaggaa	ggaaactcta	cgctgatgga	aatgtctgtg	tcttcattgg	gtggtagtta	300
tgtggggata	tacatttgtc	aaaatttatt	gaactatata	ctaaagaact	ctgcatttta	360
ttgggatgta	aataatacct	caattaaaaa	gacaaaaaaa	aaaaaaaaa		409

<210> 22

<211> 649

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(649)

<223> n = A,T,C or G

<400> 22

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acaattttca ttatcttaag cacattgtac atttctacag aacctgtgat tattctcgca      60
tgataaggat ggtacttgca tatggtgaat tactactggt gacagtttcc gcagaaatcc      120
tatttcagtg gaccaacatt gtggcatggc agcaaagcc aacattttgt ggaatagcag      180
caaatctaca agagaccctg gttggttttt cgttttgttt tctttgtttt ttcccccttc      240
tcctgaatca gcagggatgg aangagggtta gggaagttaa gaattactcc ttccagtagt      300
agctctgaag tgtcacattt aatatcagtt ttttttaaac atgattctag ttnaatgtag      360
aagagagaag aaagaggaag tgttcacttt tttaatacac tgatttagaa attgatgtc      420
ttatatcagt agttctgagg tattgatagc ttgctttatt tctgccttta cgttgacagt      480
gttgaagcag ggtgaataac taggggcata tatatttttt ttttttgtaa gctgtttcat      540
gatgttttct ttggaatttc cggataagtt caggaaaaca tctgcatggt gttatctagt      600
ctgaagttcn tatccatctc attacaacaa aaacncccag aacggnntg      649

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<210> 23
<211> 669
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(669)
<223> n = A,T,C or G

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```

<400> 23
actagtgccg tactggctga aatccctgca ggaccaggaa gagaaccagt tcagactttg      60
tactctcagt caccagctct ggaattagat aaattccttg aagatgtcag gaatgggatc      120
tactctctga cagccttttg gctgcctcgg cccagcagc cacagcagga ggaggtgaca      180
tcacctgtcg tgccccctc tgtcaagact cggacacctg aaccagctga ggtggagact      240
cgcaaggtgg tgctgatgca gtgcaacatt gagtcgggtg aggagggagt caaacaccac      300
ctgacacttc tgctgaagtt ggaggacaaa ctgaaccggc acctgagctg tgacctgatg      360
ccaaatgaga atatccccga gttggcggtt gagctggtgc agctgggctt cattagttag      420
gctgaccaga gccggttgac ttctctgcta gaagagactt gaacaagttc aattttgcca      480
ggaacagtac cctcaactca gccgctgtca cgtctcctc ttagagctca ctcgggccag      540
gccctgatct gcgctgtggc tgcctgggac gtgctgcacc ctctgtcctt cccccagtc      600
agtattacct gtgaagccct tccctccttt attattcagg anggctgggg gggctccttg      660
nttctaacc

```

```

<210> 24
<211> 442
<212> DNA
<213> Homo sapien

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<400> 24
actagtacca tcttgacaga ggatacatgc tcccaaaacg tttgttacca cacttaaaaa      60
tactgccat cattaagcat cagtttcaaa attatagcca ttcattgatt actttttcca      120
gatgactatc attattctag tcctttgaat ttgtaagggg aaaaaaaca aaaacaaaaa      180
cttacgatgc acttttctcc agcacatcag atttcaaatt gaaaattaaa gacatgctat      240
ggtaatgcac ttgctagtac tacacacttt ggtacaacaa aaaacagagg caagaaacaa      300
cggaaagaga aaagccttcc tttgttggcc cttaaactga gtcaagatct gaaatgtaga      360
gatgatctct gacgatacct gtatgttctt attgtgtaaa taaaattgct ggtatgaaat      420
gacctaaaaa aaaaaaaga aa

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<210> 25
<211> 656
<212> DNA

```

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(656)

<223> n = A,T,C or G

<400> 25

tgcaagtacc	acacactggt	tgaattttgc	acaaaaagtg	actgtaggat	caggtgatatg	60
ccccggaatg	tacagtgtct	tggtgcacca	agatgccttc	taaaggctga	cataccttgg	120
accctaattg	ggcagagagt	atagccctag	cccagtgggtg	acatgaccac	tccctttggg	180
aggcctgagg	tagaggggag	tggtatgtgt	tttctcagtg	gaagcagcac	atgagtgggt	240
gacaggatgt	tagataaagg	ctctagttag	ggtgtcattg	tcatttgaga	gactgacaca	300
ctcctagcag	ctggtaaagg	ggtgctggan	gccatggagg	anctctagaa	acattagcat	360
gggctgatct	gattacttcc	tggtatcccc	ctcactttta	tggaagtct	tattagangg	420
atgggacagt	tttccatata	cttgctgtgg	agctctggaa	cactctctaa	atttccctct	480
attaaaaatc	actgccctaa	ctacacttcc	tccttgaagg	aatagaaatg	gaactttctc	540
tgacatannt	cttggcatgg	ggagccagcc	acaaatgana	atctgaacgt	gtccagggtt	600
ctcctganac	tcactctacat	agaatttggt	aaaccctccc	ttggaataag	gaaaaa	656

<210> 26

<211> 434

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(434)

<223> n = A,T,C or G

<400> 26

actagttcag	actgccacgc	caaccocaga	aaatacccca	catgccagaa	aagtgaagtc	60
ctagggtgtt	ccatctatgt	ttcaatctgt	ccatctacca	ggcctcgcga	taaaaacaaa	120
acaaaaaaac	gctgccagg	tttagaagca	gttctgggtc	caaaaccatc	aggatcctgc	180
caccagggtt	cttttgaaat	agtaccacat	gtaaaaggga	atgtggcttt	cacttcatct	240
aataactgaa	ttgtcaggct	ttgattgata	attgtagaaa	taagtagcct	tctgtttgtg	300
gaataagtta	taatcagtat	tcactctctt	gttttttgtc	actcttttct	ctctaattgt	360
gtcatttgta	ctgtttgaaa	aatatttctt	ctatnaaatt	aaactaacct	gccttaaaaa	420
aaaaaaaaaa	aaaa					434

<210> 27

<211> 654

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(654)

<223> n = A,T,C or G

<400> 27

actagtccaa	cacagtcaga	aacattgttt	tgaatcctct	gtaaaccaag	gcattaatct	60
taataaacca	ggatccattt	aggtaccact	tgatataaaa	aggatatcca	taatgaatat	120
tttatactgc	atcctttaca	ttagccacta	aatacgttat	tgcttgatga	agacctttca	180

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cagaatccta tggattgcag catttcactt ggctacttca tacccatgcc ttaaagaggg 240
gcagtttctc aaaagcagaa acatgccgcc agttctcaag ttttcctcct aactccattt 300
gaatgtaagg gcagctggcc cccaatgtgg ggaggtccga acattttctg aattcccatt 360
ttcttggtcg cggctaaatg acagtttctg tcattactta gattccgac tttcccaaa 420
gtgttgattt acaaagaggc cagctaatag cagaaatcat gacctgaaa gagagatgaa 480
attcaagctg tgagccaggc agganctcag tatggcaaag gtcttgagaa tcngccattt 540
ggtacaaaaa aaatttttaa gcntttatgt tataccatgg aaccatagaa anggcaagg 600
aattgttaag aanaatttta agtgtccaga ccanaanga aaaaaaaaaa aaaa 654

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<210> 28
<211> 670
<212> DNA
<213> Homo sapien

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<220>
<221> misc_feature
<222> (1)...(670)
<223> n = A,T,C or G

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<400> 28
cgtgtgcaca tactgggagg atttccacag ctgcacggtc acagccctta cggattgcca 60
ggaagggggcg aaagatatgt gggataaact gagaaaagaa nccaaaaacc tcaacatcca 120
aggcagctta ttcgaactct ggggcagcgg caacggggcg gcgggggtccc tgcctccggc 180
gttcccggtg ctcttggtgt ctctctcggc agcttttagcg acctgncttt ccttctgagc 240
gtggggccag ctccccccgc ggcgcccacc cacnctcact ccatgctccc ggaaatcgag 300
aggaagatca ttagttcttt ggggacgttn gtgattctct gtgatgctga aaaacactca 360
tatagggaat gtgggaaatc ctganctctt tnttatntcg tntgatttct tgtgttttat 420
ttgccaaaat gttaccaatc agtgaccaac cnagcacagc caaaaatcgg acntcngctt 480
tagtccgtct tcacacacag aataagaaaa cggcaaacc accccacttt tnantttnat 540
tattactaan ttttttctgt tgggcaaaaag aatctcagga acngccctgg ggcnccgta 600
ctanagttaa ccnagctagt tncatgaaaa atgatgggct ccnctcaat gggaaagcca 660
agaaaaagnc 670

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<210> 29
<211> 551
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(551)
<223> n = A,T,C or G

```

```

<400> 29
actagtcctc cacagcctgt gaatccccct agacctttca agcatagtga gcggagaaga 60
agatctcagc gtttagccac cttacccatg cctgatgatt ctgtagaaaa ggtttcttct 120
ccctctccag ccactgatgg gaaagtattc tccatcagtt ctcaaaatca gcaagaatct 180
tcagtaccag aggtgcctga tgttgacat ttgccacttg agaagctggg accctgtctc 240
cctcttgact taagtcgtgg ttcagaagtt acagcaccgg tagcctcaga ttctctttac 300
cgtaatgaat gtcccagggc agaaaaagag gatacncaga tgcttccaaa tcttctttcc 360
aaagcaatag ctgatgggaa gaggagctcc agcagcagca ggaatatcga aaacagaaaa 420
aaaagtgaat ttgggaagac aaaagctcaa cagcatttgg taaggagaaa aganaagatg 480
aggaaggaag agagaagaga gacnaagatc nctacggacc gnnncggaag aagaagaagn 540
aaaaaaaaa a 551

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<210> 30
 <211> 684
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(684)
 <223> n = A,T,C or G

<400> 30
 actagttcta tctggaaaaa gcccggttg gaagaagctg tggagagtgc gtgtgcaatg 60
 cgagactcat ttcttggaag catccctggc aaaaatgcag ctgagtacaa ggttatcact 120
 gtgatagaac ctggactgct ttttgagata atagagatgc tgcagtctga agagacttcc 180
 agcacctctc agttgaatga attaatgatg gcttctgagt caactttact ggctcaggaa 240
 ccacgagaga tgactgcaga tgtaatcgag cttaaaggga aattcctcat caacttagaa 300
 ggtggtgata ttcgtgaaga gtcttcctat aaagtaattg tcatgccgac tacgaaagaa 360
 aaatgcccc gttgttgga gtatacagcg ggagtcttca gatacactgt gtcctcgatg 420
 tgcagaagtt gtcagtggga aaatagtatt aacagctcac tcgagcaaga accctcctga 480
 cagtactggg ctagaagttt ggatggatta ttacaatat aggaaagaaa gccagaatt 540
 aggtnatgag tggatgagta aatggtggan gatggggaat tcaaatacaga attatggaag 600
 aagttnttcc tgttactata gaaaggaatt atgtttattt acatgcagaa aatatanatg 660
 tgtggtgtgt accgtggatg gaan 684

<210> 31
 <211> 654
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(654)
 <223> n = A,T,C or G

<400> 31
 gcgcagaaaa ggaaccaata tttcagaaac aagcttaata ggaacagctg cctgtacatc 60
 aacatcttct cagaatgacc cagaagttat catcgtggga gctggcgtgc ttggctctgc 120
 tttggcagct gtgctttcca gagatggaag aaaggtgaca gtcattgaga gagacttaaa 180
 agagcctgac agaatagttg gagaattcct gcagccgggt ggttatcatg ttctcaaaga 240
 ccttggtctt ggagatacag tggaaaggtct tgatgccag gttgtaaag gttacatgat 300
 tcatgatcag ggaaagcaaa tcagangttc agattcctta ccctctgtca gaaaacaatc 360
 aagtgcagag tggaagagct ttccatcacg gaagattcat catgagtctc cggaagcag 420
 ctatggcaga gcccaatgca aagtttattg aaggtgttgt gttacagtta ttagaggaag 480
 atgatgttgt gatgggagtt cagtacaagg ataaagagac tgggagatat caaggaactc 540
 catgctccac tgactgttgt tgcagatggg cttttctcca anttcaggaa aagcctggtc 600
 tcaataaagt ttctgtatca ctcatthtgg ttgcttctta tgaagaatgc nccc 654

<210> 32
 <211> 673
 <212> DNA
 <213> Homo sapien

<220>

<221> misc_feature
 <222> (1)...(673)
 <223> n = A,T,C or G

<400> 32
 actagtgaag aaaaagaaat tctgatacgg gacaaaaatg ctcttcaaaa catcattctt 60
 tatcacctga caccaggagt ttctattgga aaaggatttg aacctggtgt tactaacatt 120
 ttaaagacca cacaaggaag caaaatcttt ctgaaagaag taaatgatac acttctggtg 180
 aatgaattga aatcaaaaga atctgacatc atgacaacaa atggtgtaat tcatgttgta 240
 gataaactcc tctatccagc agacacacct gttggaaatg atcaactgct ggaaatactt 300
 aataaattaa tcaaatacat ccaaattaag tttgttcgtg gtagcacctt caaagaaatc 360
 cccgtgactg tctatnagcc aattattaaa aaatacacca aaatcattga tgggagtgcc 420
 tgtgggaaat aactgaaaaa gagaccgaga agaacgaatc attacaggtc ctgaaataaa 480
 atacctagga tttctactgg aggtggagaa acagaagaac tctgaagaaa ttgttacaag 540
 aagangtccc aaggtcacca aattcattga aggtggtgat ggtctttatt tgaagatgaa 600
 gaaattaaaa gacgcttcag ggagacnccc catgaaggaa ttgccagcca caaaaaaatt 660
 cagggattag aaa 673

<210> 33
 <211> 673
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(673)
 <223> n = A,T,C or G

<400> 33
 actagttatt tactttcctc cgcttcagaa ggtttttcag actgagagcc taagcatact 60
 ggatctgttg tttcttttgg gtctcacctc atcagtgtgc atagtggcag aaattataaa 120
 gaaggttgaa aggagcaggg aaaagatcca gaagcatgtt agttcgacat catcatcttt 180
 tcttgaagta tgatgcatat tgcattatth tatttgcaaa ctaggaattg cagtctgagg 240
 atcatttaga agggcaagtt caagaggata tgaagatttg agaacttttt aactattcat 300
 tgactaaaaa tgaacattaa tgttnaagac ttaagacttt aacctgctgg cagtccaaa 360
 tgaaattatg caactttgat atcatattcc ttgatttaaa ttgggctttt gtgattgant 420
 gaaactttat aaagcatatg gtcagttatt tnattaaaaa ggcaaacctt gaaccacctt 480
 ctgcacttaa agaagtctaa cagtacaaat acctatctat cttagatgga tntatttntt 540
 tntattttta aatattgtac tatttatggt nggtggggct ttcttactaa tacacaaatn 600
 aatttatcat ttcaanggca ttctatttgg gtttagaagt tgattccaag nantgcatat 660
 ttcgctactg tnt 673

<210> 34
 <211> 684
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(684)
 <223> n = A,T,C or G

<400> 34
 actagtttat tcaagaaaag aacttactga ttctctgtt cctaaagcaa gagtggcagg 60

tgatcagggc	tggtgtagca	tccggttcct	ttagtgcagc	taactgcatt	tgtcactgat	120
gaccaaggag	gaaatcacta	agacatttga	gaagcagtgg	tatgaacggt	cttgacaag	180
ccacagttct	gagccttaac	cctgtagttt	gcacacaaga	acgagctcca	cctccccttc	240
ttcaggagga	atctgtgcgg	atagattggc	tggacttttc	aatggttctg	ggttgcaagt	300
gggcactggt	atggctgggt	atggagcgga	cagccccagg	aatcagagcc	tcagcccggc	360
tgcctggttg	gaaggtacag	gtgttcagca	ccttcggaaa	aagggcataa	agtngtgggg	420
gacaattctc	agtccaagaa	gaatgcattg	accattgctg	gctatttgct	tncctagtan	480
gaattggatn	catttttgac	cangatnntt	ctnctatgct	ttnttgcaat	gaaatcaaat	540
cccgatttat	ctacaagtgg	tatgaagtcc	tgcnnccccc	agagaggctg	ttcaggcnat	600
gtcttccaag	ggcaggggtg	gttacaccat	tttacctccc	ctctcccccc	agattatgna	660
cncagaagga	atttntttcc	tccc				684

<210> 35

<211> 614

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(614)

<223> n = A,T,C or G

<400> 35

actagtccaa	cgcgttngen	aatattcccc	tggtagccta	cttccttacc	cccgaatatt	60
ggtaagatcg	agcaatggct	tcaggacatg	ggttctcttc	tcctgtgatc	attcaagtgc	120
tactgcatg	aagactggct	tgtctcagtg	tntcaacctc	accagggctg	tctcttggtc	180
cacacctcgc	tcctgttag	tgccgtatga	cagcccccat	canatgacct	tggccaagtc	240
acggtttctc	tgtgggtcaat	gttggtnggc	tgattgggtg	aaagtanggt	ggaccaaagg	300
aagncncgtg	agcagncanc	nccagttctg	caccagcagc	gcctccgtcc	tactnggggtg	360
ttcngtttc	tcctggccct	gngtgggcta	nggcctgatt	cgggaanatg	cctttgcang	420
gaagganga	taantgggat	ctaccaattg	attctggcaa	aacnatntct	aagattnttn	480
tgctttatgt	ggganacana	tctantcttc	atttnttgct	gnanatnaca	ccctactcgt	540
gntcgancnc	gtcttcgatt	ttcgganaca	cnccantnaa	tactggcggt	ctgttgtaa	600
aaaaaaaaaa	aaaaa					614

<210> 36

<211> 686

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(686)

<223> n = A,T,C or G

<400> 36

gtggctggcc	cggttctccg	cttctcccca	tcccctaactt	tcctccctcc	ctccctttcc	60
ctccctcgtc	gactgttgct	tgtctggcgc	agactccctg	acccctccct	caccctccc	120
taacctcggg	gccaccggat	tgccttctt	ttcctgttgc	ccagcccagc	cctagtgtca	180
ggcggggggc	ctggagcagc	ccgaggcact	gcagcagaag	ananaaaaga	cacgacnaac	240
ctcagctcgc	cagtccggtc	gctngcttcc	cgccgcatgg	caatnagaca	gacgccgctc	300
acctgctctg	ggcacacgcg	acccgtgggt	gatttggcct	tcagtggcat	cacccttatg	360
ggtatttctt	aatcagcgct	tgcaaagatg	gttaacctat	gctacgccag	ggagatacag	420
gagactggat	tggaacattt	ttgggggtcta	aagggtctgtt	tgggggtgcaa	cactgaataa	480

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ggatgccacc aaagcagcta cagcagctgc agatttcaca gccaagtgt gggatgctgt 540
ctcagganat naattgataa cctggctcat aacacattgt caagaatgtg gatttcccca 600
ggatattatt atttgtttac cggggganag gataactgtt tcnontattt taattgaaca 660
aactnaaaca aanctaagg aaatcc 686

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<210> 37
<211> 681
<212> DNA
<213> Homo sapien

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<220>
<221> misc_feature
<222> (1)...(681)
<223> n = A,T,C or G

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<400> 37

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gagacanacn naacgtcang agaanaaaag angcatggaa cacaanccag gcncgatggc 60
caccttccca ccagcancca gcgccccca gcngcccca ngncggang accangactc 120
cancctgnat caatctganc tctattcctg gccatncct acctcggagg tggangccgn 180
aaaggtcgca cnnncagaga agctgctgcc ancaccancc gcccnnccc tgcgggctn 240
nataggaaac tggtgaccnn gctgcanaat tcatacagga gcacgcgang ggcacnnct 300
cacactgagt tnnngatgan gcctnaccan ggacctnccc cagcnnattg annacnggac 360
tgcggaggaa ggaagacccc gnacnggac cctggcggcn tgccaccccc ccacccttag 420
gattatnccc cttgactgag tctctgagg gctaccgaa cccgcctcca ttccctacca 480
natnntgctc natcgggact gacangctgg ggatnggagg ggctatcccc cancatcccc 540
tnanaccaac agcnacngan natnggggct ccccnnggct ggngcaacnc tctncaccc 600
cggcgcnngc cttcgggtgt gtcctcctc aacnaattcc naaanggcgg gcccccngt 660
ggactccten ttgttccctc c 681

```

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<210> 38
<211> 687
<212> DNA
<213> Homo sapien

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<220>
<221> misc_feature
<222> (1)...(687)
<223> n = A,T,C or G

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<400> 38

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```

canaaaaaaa aaaacatggc cgaaaccagn aagctgcgcg atggcgccac ggccccctctt 60
ctcccggcct gtgtccggaa ggtttccctc cgaggcgccc cggtccccgc aagcggagga 120
gagggcgga cntgcccggg ccggagctca naggcctgg gcccgctctg ctctcccgc 180
atcgcaaggg cggcgctaac ctnaggcctc cccgcaaagg tccccnangc ggngggcgcg 240
gggggctgtg anaaccgcaa aaanaacgct gggcgcgcn cgaaccgcgt cacccccgcg 300
aaggananac ttccacagan gcagcgtttc cacagccan agccaenttt ctaggggtgat 360
gcaccccagt aagtctctgn cggggaagct caccgctgtc aaaaaanctc ttcgctccac 420
cggcgcacna agggangan ggcangan cgcggcccgc acaggctcgc tgatcacgtc 480
gcccgcctta ntctgctttt gtgaatctcc actttgttca accccacccg ccgttctctc 540
ctccttgcc cttcctctna ccttaanaac cagcttctc taccnctng tanttctct 600
gcncnngtng aaattaattc ggtccnccgg aacctcttnc ctgtggcaac tgctnaaaga 660
aactgctgtt ctgnttactg cngtccc 687

```

```

<210> 39

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<211> 695
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(695)
 <223> n = A,T,C or G

<400> 39

actagtctgg	cctacaatag	tgtgattcat	gtaggacttc	tttcatcaat	tcaaaacccc	60
tagaaaaacg	tatacagatt	atataagtag	ggataagatt	tctaacattt	ctgggctctc	120
tgaccctctg	gctagactgt	ggaaagggag	tattattata	gtatacaaca	ctgctgttgc	180
cttattagtt	ataacatgat	aggtgctgaa	ttgtgattca	caatttaaaa	acactgtaat	240
ccaaactttt	ttttttaact	gtagatcatg	catgtgaatg	ttaatgttaa	tttgttcaan	300
gttgttatgg	gtagaaaaaa	ccacatgcct	taaaatttta	aaaagcaggg	cccaaactta	360
ttagtttaaa	attaggggta	tgtttccagt	ttgttattaa	ntggttatag	ctctgtttag	420
aanaaatcna	ngaacangat	ttngaaantt	aagntgacat	tatttnccag	tgacttgтта	480
atttgaaatc	anacacggca	ccttccgttt	tggttctatt	ggnttttgaa	tccaancngg	540
ntccaaatct	tnttggaaac	ngtccnttta	acttttttac	nanatcttat	ttttttattt	600
tggaatggcc	ctattttaang	ttaaaagggg	ggggnnccac	naccattcnt	gaataaaact	660
naatatatat	ccttggtccc	ccaaaattta	aggng			695

<210> 40
 <211> 674
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(674)
 <223> n = A,T,C or G

<400> 40

actagtagtc	agttgggagt	ggttgctata	ccttgacttc	atttatatga	atttccactt	60
tattaaataa	tagaaaagaa	aatcccggtg	cttgacagtag	agttatagga	cattctatgc	120
ttacagaaaa	tatagccatg	attgaaatca	aatagtaaag	gctgttctgg	ctttttatct	180
tcttagctca	tcttaaataa	gtagtacact	tgggatgcag	tgcgctctgaa	gtgctaataca	240
gttgtaacaa	tagcacaaat	cgaacttagg	atgtgtttct	tctcttctgt	gtttcgattt	300
tgatcaattc	tttaattttg	ggaacctata	atacagtttt	cctattcttg	gagataaaaa	360
ttaaattggat	cactgatatt	taagtcattc	tgcttctcat	ctnaatattc	catattctgt	420
attaganaaa	antacctccc	agcacagccc	cctctcaaac	cccacccaaa	accaagcatt	480
tggaatgagt	ctcctttatt	tccgaantgt	ggatgggtata	acccatatcn	ctccaatttc	540
tgnttggggt	gggtattaat	ttgaactgtg	catgaaaagn	ggnaatcttt	nctttggggtc	600
aaantttnc	gggttaattg	nctngncaaa	tccaatttnc	tttaagggtg	tctttataaa	660
atttgctatt	cngg					674

<210> 41
 <211> 657
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature

<221> misc feature

<222> (1)...(449)

<223> n = A,T,C or G

<400> 44

actagtagca	tcttttctac	aacgttaaaa	ttgcagaagt	agcttatcat	taaaaaacia	60
caacaacaac	aataacaata	aatcctaagt	gtaaatcagt	tattctaccc	cctaccaagg	120
atatcagcct	gttttttccc	ttttttctcc	tggaataaat	tgtgggcttc	ttcccaaatt	180
tctacagcct	ctttcctctt	ctcatgcttg	agcttccttg	tttgacgcga	tgcgttgtgc	240
aagantgggc	tgtttngctt	ggantncggg	ccnagtggaa	ncatgctttc	ccttggtact	300
gttgaagaa	actcaaacct	tcnanccta	gggtgttcca	ttttgtcaag	tcactactgt	360
atttttgtac	tggcattaac	aaaaaaagaa	atnaaatatt	gttccattaa	actttaataa	420
aactttaaaa	gggaaaaaaa	aaaaaaaaa				449

<210> 45

<211> 559

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(559)

<223> n = A,T,C or G

<400> 45

actagtgtgg	gggaatcacg	gacacttaaa	gtcaatctgc	gaaataattc	ttttattaca	60
cactcactga	agtttttgag	tcccagagag	ccattctatg	tcaaacattc	caagtactct	120
ttgagagccc	agcattacat	caacatgccc	gtgcagttca	aaccgaagtc	cgcaggcaaa	180
tttgaagctt	tgcttgtcat	tcaaacagat	gaaggcaaga	gtattgctat	tcgactaatt	240
ggtgaagctc	ttggaaaaaa	ttnactagaa	tactttttgt	gttaagttaa	ttacataagt	300
tgtattttgt	taactttatc	tttctacact	acaattatgc	ttttgtatat	atattttgta	360
tgatggatat	ctataattgt	agattttggt	tttacaagct	aatactgaag	actcgactga	420
aatattatgt	atctagccca	tagtattgta	cttaactttt	acaggggtgaa	aaaaaaattc	480
tgtgtttgca	ttgattatga	tattctgaat	aaatatggga	atatatttta	atgtgggtaa	540
aaaaaaaaaa	aaaaaggaa					559

<210> 46

<211> 731

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(731)

<223> n = A,T,C or G

<400> 46

actagttcta	gtaccatggc	tgtcatagat	gcaaccatta	tattccattt	agtttcttcc	60
tcaggttccc	taacaattgt	ttgaaactga	atatatatgt	ttatgtatgt	gtgtgtgttc	120
actgtcatgt	atatggtgta	tatgggatgt	gtgcagtttt	cagttatata	tatattcata	180
tatacatatg	catatatatg	tataatatac	atatatacat	gcatacactt	gtataatata	240
catatatata	cacatatatg	cacacatatn	atcactgagt	tccaaagtga	gtctttattt	300
ggggcaattg	tattctctcc	ctctgtctgc	tcactgggcc	tttgcaagac	atagcaattg	360
cttgatttcc	tttgataaag	agtccttatct	tcggcactct	tgactctagc	cttaacttta	420
gatttctatt	ccagaatacc	tctcatatct	atcttaaaac	ctaaganggg	taaagangtc	480

ataagattgt	agtatgaaag	antttgctta	gttaaattat	atctcaggaa	actcattcat	540
ctacaaatta	aattgtaaaa	tgatggtttg	ttgtatctga	aaaaatggtt	agaacaagaa	600
atgtaactgg	gtacctgtta	tatcaaagaa	cctcnattta	ttaagtctcc	tcatagccan	660
atccttatat	ngccctctct	gacctgantt	aatananact	tgaataatga	atagttaatt	720
taggnntggg	c					731

<210> 47
 <211> 640
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(640)
 <223> n = A,T,C or G

<400> 47

tgcgngccgg	tttggccctt	ctttgtanga	cactttcatc	cgccctgaaa	tcttcccgat	60
cgtaataaac	tcctcaggtc	cctgcctgca	caggggtttt	tcttantttg	ttgcctaaca	120
gtacaccaa	tgtgacatcc	tttcaccaat	atngattnct	tcataccaca	tcntcnatgg	180
anacgactnc	aacaattttt	tgatnaccn	aaanactggg	ggctnnaana	agtacantct	240
ggagcagcat	ggacctgtcn	gcnactaang	gaacaanagt	nntgaacatt	tacacaacct	300
ttggtatgtc	ttactgaaag	anagaaacat	gcttctnncc	ctagaccacg	aggncaacccg	360
caganattgc	caatgccaaag	tccgagcggg	tagatcaggt	aatacattcc	atggatgcat	420
tacatacntt	gtccccgaaa	nanaagatgc	cctaanggct	tcttcanact	ggtcengaaa	480
acantacac	ctggtgcttg	ganaacanac	tctttggaag	atcatctggc	acaagttccc	540
cccagtggtt	tttnccttgg	cacctanctt	accanatcna	ttcggaancc	attctttgcc	600
ntggcnttnt	nttgggacca	ntctttctcac	aactgnacc			640

<210> 48
 <211> 257
 <212> DNA
 <213> Homo sapien

<400> 48

actagtatat	gaaaatgtaa	atatcacttg	tgtactcaaa	caaaagttgg	tcttaagctt	60
ccaccttgag	cagccttgga	aacctaacct	gcctctttta	gcataatcac	attttctaaa	120
tgattttctt	tgttcttgaa	aaagtgattt	gtattagttt	tacatttggt	ttttggaaga	180
ttatatttgt	atatgtatca	tcataaaata	tttaaataaa	aagtatcttt	agagtgaata	240
aaaaaaaaaa	aaaaaaa					257

<210> 49
 <211> 652
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(652)
 <223> n = A,T,C or G

<400> 49

actagttcag	atgagtggct	gctgaagggg	cccccttgct	attttcatta	taacccaatt	60
tccacttatt	tgaactctta	agtcataaat	gtataatgac	ttatgaatta	gcacaggttaa	120


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gttgacacta gaaactgccc atttctgtat tacactatca aataggaaac attggaaaga 180
tggggaaaaa aatcttattt taaaatggct tagaaagttt tcagattact ttgaaaattc 240
taaactttct tctgtttcca aaacttgaaa atatgtagat ggactcatgc attaagactg 300
ttttcaaagc tttcctcaca tttttaaaagt gtgattttcc ttttaatata catattttatt 360
ttcttttaaag cagctatata ccaacccatg actttggaga tatacctatn aaaccaatat 420
aacagcangg ttattgaagc agctttctca aatgttgctt cagatgtgca agttgcaaatt 480
tttattgtat ttgtanaata caatttttgt tttaaactgt atttcaatct atttctccaa 540
gatgcttttc atatagagtg aaatatccca ngataactgc ttctgtgtcg tcgcatttga 600
cgcataactg cacaaatgaa cagtgtatac ctcttggttg tgcattnacc cc 652

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<210> 50

<211> 650

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(650)

<223> n = A,T,C or G

<400> 50

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ttgcgctttg atttttttag ggcttgtgccc ctgtttcact tatagggtct agaatgcttg 60
tgttgagtaa aaaggagatg cccaatatcc aaagctgcta aatgttctct ttgccataaa 120
gactccgtgt aactgtgtga acacttgga tttttctcct ctgtcccag gtcgtcgtct 180
gctttctttt ttgggttctt tctagaagat tgagaaatgc atatgacagg ctgagancac 240
ctccccaaac acacaagctc tcagccacan gcagcttctc cacagcccca gcttcgcaca 300
ggctcctgga nggctgcctg ggggaggcag acatgggagt gccaaagggtg ccagatgggt 360
ccaggactac aatgtcttta tttttaactg tttgccactg ctgccctcac ccctgcccg 420
ctctggagta cgtctgccc canacaagt ggantgaaat ggggtggtgg gggaaactg 480
attcccantt agggggtgcc taactgaaca gtagggatan aagggtgtgaa cctgngaant 540
gcttttataa attatnttcc ttgttanatt tattttttaa ttaatctct gttnaactgc 600
ccngggaaaa ggggaaaaaa aaaaaaaaaa tctnttttaa cacatgaaca 650

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<210> 51

<211> 545

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(545)

<223> n = A,T,C or G

<400> 51

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tggcgtgcaa ccagggtagc tgaagtttgg gtctgggact ggagattggc cattaggcct 60
cctganattc cagctccctt ccaccaagcc cagtcttgct acgtggcaca gggcaaacct 120
gactcccttt gggcctcagt ttccctctcc ctcatgana tgaaaagaat actacttttt 180
cttgttggtc taacnttgct ggacncaaag tgngtcatt attgttgat tgggtgatgt 240
gtncaaaact gcagaagctc actgcctatg agaggaanta agagagatag tggatganag 300
ggacanaagg agtcattatt tggatatagat ccaccntcc caacctttct ctccctcagtc 360
cctgcncctc atgtnctggt tntgggtgagt cctttgtgcc accanccatc atgctttgca 420
ttgctgccat cctgggaagg ggggtgnatcg tctcacaact tgttgtcatc gtttganatg 480
catgctttct tnatnaaaca aanaaanaa tgtttgacag ngtttaaaat aaaaaanaaa 540
caaaa

```

<210> 52
 <211> 678
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(678)
 <223> n = A,T,C or G

<400> 52
 actagtagaa gaactttgccc gctttttgtgc ctctcacagg cgcctaaagt cattgccatg 60
 ggaggaagac gatttggggg gggagggggg gggggcangg tccgtggggc tttccctant 120
 ntatctccat ntccantggn cnnrtgtcgcc tcttccctcg tcncaatnga anttantccc 180
 tggneccenn nccctctcnn nccnncncc cccccctccg ncnccctcnn ctttttntan 240
 ncttcccat ctcncccc cctnanngtc ccaacnccgn cagcaatnnc ncaactnctc 300
 nctcncncc tcnnccggt cttctnttct cnactntnnc ncnntnccn tgccnntnaa 360
 annctctccc cnetgcaanc gattctctcc ctcccnann ctntccactc cntncttctc 420
 ncnegctect nttctcnncc ccacctctcn ccttcgnccc cantacnctc nccncccttn 480
 cgnntcnttn nnntcctcnn accnccncc tcccttncnc cctcttctcc ccggtntntc 540
 tctctccncc ncnncnccct cnnccentcc nngcgncnt ttcgcgccn cncnccntt 600
 ccttctcnc cantccatcn cntntnccat nctnccncc nctcacncc gctnccccn 660
 ntctctttca cacngtcc 678

<210> 53
 <211> 502
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(502)
 <223> n = A,T,C or G

<400> 53
 tgaagatcct ggtgtcgcca tgggcccgcg ccccgcccgt tgttaccggt attgtaagaa 60
 caagccgtac ccaaagtctc gcttctgccg aggtgtccct gatgccaaaa ttgcattttt 120
 tgacctgggg cggaaaaang caaaantgga tgagtctccg ctttgtggcc acatggtgtc 180
 agatcaatat gagcagctgt cctctgaagc cctgnangct gcccgattt gtgccaataa 240
 gtacatggta aaaagtngtg gcnaagatgc ttccatatcc ggggtgcgnt ccaccccttc 300
 cacgtcatcc gcatacaaaa gatgttgctc tgtgctgggg ctgacaggct cccaacaggc 360
 atgcgaagtg cctttggaaa acccanggca ctgtggccag ggttcacatt gggccaattn 420
 atcatgttca tccgcaccaa ctgcagaaca angaantgt naattnaagc cctgcccagg 480
 gncaanttca aatttcccgg cc 502

<210> 54
 <211> 494
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(494)

<223> n = A,T,C or G

<400> 54

actagtccaa	gaaaaaatatg	cttaatgtat	attacaaaagg	ctttgtatat	gttaacctgt	60
ttaaagcca	aaagtttgct	ttgtccacaa	tttccttaag	acctcttcag	aaagggattt	120
gtttgcctta	atgaatactg	ttgggaaaaa	acacagtata	atgagtgaaa	agggcagaag	180
caagaaattt	ctacatctta	gcgactccaa	gaagaatgag	tatccacatt	tagatggcac	240
attatgagga	ctttaatctt	tccttaaaca	caataatggt	ttcttttttc	ttttattcac	300
atgatttcta	agtatatttt	tcattgcagga	cagtttttca	accttgatgt	acagtgactg	360
tggttaaattt	ttctttcagt	ggcaacctct	ataatcttta	aaatatgggtg	agcatcttgt	420
ctgttttgaa	ngggatatga	cnatnaatct	atcagatggg	aaatcctggt	tccaagttag	480
aaaaaaaaaa	aaaa					494

<210> 55

<211> 606

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(606)

<223> n = A,T,C or G

<400> 55

actagtaaaa	agcagcattg	ccaaataatc	cctaattttc	cactaaaaat	ataatgaaat	60
gatgttaagc	tttttgaaaa	gttttaggtta	aacctactgt	tgtttagatta	atgtatttgt	120
tgcttccctt	tatctggaat	gtggcattag	cttttttatt	ttaaccctct	ttaattctta	180
ttcaattcca	tgacttaagg	ttggagagct	aaacactggg	atttttggat	aacagactga	240
cagttttgca	taattataat	cggcattgta	catagaaagg	atatggctac	cttttggttaa	300
atctgcactt	tctaaatata	aaaaaaggga	aatgaagtat	aatcaattt	ttgtataatc	360
tgtttgaaac	atgantttta	tttgcttaat	attanggctt	tgcccttttc	tgtttagtctc	420
ttgggaccc	gtgtaaaact	gttctcatta	aacaccaaac	agttaagtcc	attctctggg	480
actagctaca	aattccgttt	catattctac	ntaacaattt	aaattaactg	aaatatctct	540
anatggtcta	cttctgtcnt	ataaaaaacna	aacttgantt	nccaaaaaaa	aaaaaaaaaa	600
aaaaaa						606

<210> 56

<211> 183

<212> DNA

<213> Homo sapien

<400> 56

actagtatat	ttaaacttac	aggcttattt	gtaatgtaaa	ccaccatttt	aatgtactgt	60
aattaacatg	gttataatac	gtacaatcct	tcctcatcc	catcacacaa	ctttttttgt	120
gtgtgataaa	ctgatttttg	tttgcaataa	aaccttgaaa	aataaaaaaa	aaaaaaaaaa	180
aaa						183

<210> 57

<211> 622

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(622)

<223> n = A,T,C or G

<400> 57

actagtcact	actgtcttct	ccttgtagct	aatcaatcaa	tattcttccc	ttgcctgtgg	60
gcagtggaga	gtgctgtctg	gtgtacgctg	cacctgccca	ctgagttggg	gaaagaggat	120
aatcagttag	cactgttctg	ctcagagctc	ctgatctacc	ccacccccta	ggatccagga	180
ctgggtcaaa	gctgcatgaa	accaggccct	ggcagcaacc	tgggaatggc	tggaggtggg	240
agagaacctg	acttctcttt	ccctctccct	cctccaacat	tactggaact	ctatcctgtt	300
agggatcttc	tgagcttggt	tccctgctgg	gtgggacaga	agacaaagga	gaagggangg	360
tctacaanaa	gcagcccttc	tttgcctct	gggggttaatg	agcttgacct	ananttcagt	420
gaganaccan	aagcctctga	tttttaattt	ccntnaaatg	tttgaagtnt	atatntacat	480
atatatat	ctttnaatnt	ttgagtcctt	gatatgtctt	aaaatccant	ccctctgccn	540
gaaacctgaa	ttaaaacat	gaanaaaaaa	gtttncctta	aagatgttan	taattaattg	600
aaacttgaaa	aaaaaaaaaa	aa				622

<210> 58

<211> 433

<212> DNA

<213> Homo sapien

<400> 58

gaacaaattc	tgattgggta	tgtaccgtca	aaagacttga	agaaatttca	tgattttgca	60
gtgtggaagc	gttgaaaatt	gaaagttact	gcttttccac	ttgctcatat	agtaaaggga	120
tcctttcagc	tgccagtgtt	gaataatgta	tcacccagag	tgatgttatc	tgtgacagtc	180
accagcttta	agctgaacca	ttttatgaat	accaaataaa	tagacctctt	gtactgaaaa	240
catatttggt	actttaatcg	tgctgcttgg	atagaaatat	ttttactggg	tcttctgaat	300
tgacagtaaa	cctgtccatt	atgaatggcc	tactgttcta	ttatttggtt	tgacttgaat	360
ttatccacca	aagacttcat	ttgtgtatca	tcaataaagt	tgatgtttc	aactgaaaaa	420
aaaaaaaaaa	aaa					433

<210> 59

<211> 649

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(649)

<223> n = A,T,C or G

<400> 59

actagttatt	atctgacttt	cnggttataa	tcatttcta	gagtgtgaag	tagcctctgg	60
tgtcatttgg	atttgcattt	ctctgatgag	tgatgctatc	aagcaccttt	gctgggtgctg	120
ttggccatat	gtgtatgttc	cctggagaag	tgtctgtgct	gagccttggc	ccacttttta	180
attaggcgtn	tgtcttttta	ttactgagtt	gtaaganttc	tttatatatt	ctggattcta	240
gacccttata	agatacatgg	tttgcaataa	ttttctccca	ttctgtgggt	tgtgttttca	300
ctttatcgat	aatgtcctta	gacatataat	aaatttgtat	tttaaaagtg	acttgatttg	360
ggctgtgcaa	ggtgggctca	cgcttgtaat	cccagcactt	tgggagactg	aggtgggtgg	420
atcatatgan	gangctagga	gttcgaggtc	agcctggcca	gcatagcgaa	aacttgtctc	480
tacnaaaaaa	acaaaaatta	gtcaggcatg	gtgggtgcacg	tctgtaatac	cagcttctca	540
ggangctgan	gcacaaggat	cacttgaacc	ccagaangaa	gangttgcag	tgantcgaag	600
atcatgccag	ggcaacaaaa	atgagaactt	gtttaaaaaa	aaaaaaaaaa		649

<210> 60
 <211> 423
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(423)
 <223> n = A,T,C or G

<400> 60
 actagtccag gccttccagt tcaactgacaa acatggggaa gtgtgcccag ctggctggaa 60
 acctggcagt gataccatca agcctgatgt ccaaaagagc aaagaatatt tctccaagca 120
 gaagtgagcg ctgggctggt ttagtgccag gctgcggtgg gcagccatga gaacaaaacc 180
 tcttctgtat ttttttttc cattagtana acacaagact cngattcagc cgaattgtgg 240
 tgtcttataa ggcagggcct tcctacaggg ggtgganaaa acagcctttc ttcctttggt 300
 aggaatggcc tgagttggcg ttgtgggcag gctactgggt tgtatgatgt attagtagag 360
 caaccatta atcttttgta gtttgatna aacttganct gagaccttaa acaaaaaaaaa 420
 aaa 423

<210> 61
 <211> 423
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(423)
 <223> n = A,T,C or G

<400> 61
 cgggactgga atgtaaagtg aagttcggag ctctgagcac gggctcttcc cgccgggtcc 60
 tccctcccca gacccagag ggagaggccc accccgcccc gcccccccc agccctgct 120
 caggtctgag tatggtggg agtcgggggc cacaggcctc tagctgtgct gctcaagaag 180
 actggatcag ggtanctaca agtgggcggg ccttgccctt gggattctac cctgttccta 240
 atttggtgtt ggggtgcggg gtccctggcc cctttttcca cactncctcc ctcngacag 300
 caacctccct tggggcaatt gggcctggnt ctccnccgn tgttgcnaacc ctttgttggt 360
 ttaaggnttt taaaaatggt annttttccc ntgcnggggt taaaaaagga aaaaactnaa 420
 aaa 423

<210> 62
 <211> 683
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(683)
 <223> n = A,T,C or G

<400> 62
 gctggagagg ggtacggact ttcttggagt tgtcccaggt tggaatgaga ctgaactcaa 60
 gaagagaccc taagagactg gggaatggtt cctgccttca ggaaagtga agacgcttag 120
 gctgtcaaca cttaaaggaa gtccccttga agcccagagt ggacagacta gaccattga 180

gctgtcaaca cttaaaggaa gtccccttga agcccagagt ggacagacta gaccattga

```

tggggccact ggccatggtc cgtggacaag acattccngt gggccatggc acaccggggg 240
ggatcaaaat gtgtacttgt ggggtctcgc cccttgccaa aaccaaacca ntcccactcc 300
tgtcnttgga ctttcttccc attccctcct ccccaaatgc acttcccctc ctccctctgc 360
ccctcctgtg tttttggaat tctgtttccc tcaaaattgt taatttttta nttttngacc 420
atgaacttat gtttggggtc nangttcccc ttaccaatgc atactaatat attaatgggt 480
atttattttt gaaatatttt ttaatgaact tggaaaaaat tnttgaatt tccttncttc 540
cntttntttt ggggggggtg ggggngtggg ttaaaatttt ttggaancc cnatnggaaa 600
tntttacttg gggccccctt naaaaaantn anttccaatt cttnnatngc cctntttccn 660
ctaaaaaaa ananannaaa aan 683

```

```

<210> 63
<211> 731
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(731)
<223> n = A,T,C or G

```

```

<400> 63
actagtcata aaggggtgtg gcgtcttcga cgtggcggtc ttggcgccac tgctgcgaga 60
cccggccctg gacctcaagg tcattccactt ggtgcgtgat ccccgcgagg tggcgagttc 120
acggatccgc tcgcgccacg gcctcatccg tgagagccta cagggtggtg gcagccgaga 180
ccgcgagctc accgcatgcc cttcttgagg gccgcggggc acaagcttgg cgccanaaa 240
gaaggcgtn ggggcccgca aantaccacg ctctgggcgc tatggaangt cctcttgcaa 300
taatattggt tnaaaanctg canaanagcc cctgcancct cctgaactgg gntgcagggc 360
cncttacctn gtttgntg ggttaciaag aacctgtttn ggaaaaccct nccnaaaacc 420
ttccgggaaa attntncaaa ttttntttgg ggaattnttg ggtaaaccct ccnaaaatgg 480
gaaacntttt tgcctnnaa antaaaccat tnggttccgg ggcccccccc ncaaaaccct 540
ttttntttt tttntgcccc cantnncccc ccggggcccc tttttttngg ggaaaanccc 600
ccccctncc nanantttta aaaggngggg anaatttttn nttnccccc gggncccccn 660
ggngntaaaa nggtttcncc cccccgagg gnggggnnnc ctennaacc cntntcnna 720
cncnttttn n 731

```

```

<210> 64
<211> 313
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(313)
<223> n = A,T,C or G

```

```

<400> 64
actagttgtg caaaccacga ctgaagaaag acgaaaagt ggaataact tgcaacgtct 60
gttagagatg gttgctacac atgttgggtc ttagagaaa catcttgagg agcagattgc 120
taaagttgat agagaatat aagaatgcat gtcagaagat ctctcgaaa atattaaaga 180
gattagagat aagtatgaga agaaagctac tctaattaag tcttctgaag aatgaagatn 240
aaatgttgat catgtatata tatccatagt gaataaaatt gtctcagtaa agttgtaaaa 300
aaaaaaaaaaa aaa 313

```

```

<210> 65

```

<211> 420
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(420)
 <223> n = A,T,C or G

<400> 65
 actagttccc tggcaggcaa gggcttccaa ctgaggcagt gcatgtgtgg cagagagagg 60
 caggaagctg gcagtggcag cttctgtgtc tagggagggg tgtggctccc tccttccttg 120
 tctgggaggt tggagggaag aatctaggcc ttagcttgcc ctccctgccac ccttcccctt 180
 gtagatactg ccttaacact cctcctcttc tcagctgtgg ctgccaccca agccagggtt 240
 ctccgtgctc actaatttat ttccaggaaa ggtgtgtgga agacatgagc cgtgtataat 300
 atttgtttta acattttcat tgcaagtatt gaccatcatc cttggttgtg tatcgttgta 360
 acacaaatta atgatattaa aaagcatcca aacaaagccn annnnnaana nnannngaaa 420

<210> 66
 <211> 676
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(676)
 <223> n = A,T,C or G

<400> 66
 actagtttcc tatgatcatt aaactcattc tcagggttaa gaaaggaatg taaatttctg 60
 cctcaatttg tacttcatca ataagttttt gaagagtgca gatttttagt caggtcttaa 120
 aaataaactc acaaactctg atgcatttct aaattctgca aatgtttcct ggggtgactt 180
 aacaaggaat aatcccacaa tatacctagc tacctaatac atggagctgg ggctcaaccc 240
 actgttttta aggatttgcg cttacttgtg gctgaggaaa aataagtagt tccgagggaa 300
 gtagttttta aatgtgagct tatagatngg aaacagaata tcaacttaat tatggaaatt 360
 gttagaaacc tgttctcttg ttatctgaat cttgattgca attactattg tactggatag 420
 actccagccc attgcaaagt ctgagatc ttanctgtgt agttgaattc cttggaaatt 480
 ctttttaaga aaaaattgga gtttnaaaga aataaacccc tttgttaaat gaagcttggc 540
 tttttggtga aaaanaatca tcccgcaggg cttattgttt aaaaanggaa ttttaagcct 600
 ccctggaaaa anttgtaaat taaatgggga aaatgntggg naaaaattat ccgttagggg 660
 ttaaagggaa aactta 676

<210> 67
 <211> 620
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(620)
 <223> n = A,T,C or G

<400> 67
 caccattaaa gctgcttacc aagaacttcc ccagcatttt gacttccttg tttgatagct 60

CCCTGGAAAA

```
<210> 68
<211> 551
<212> DNA
<213> Homo sapien
```

<400> 68

```
<210> 69
<211> 396
<212> DNA
<213> Homo sapien
```

<400> 69

<210> 70
<211> 536

<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(536)
<223> n = A,T,C or G

<400> 70
actagtgcaa aagcaaatat aaacatcgaa aaggcggtcc tcacgtttagc tgaagatatc 60
cttcgaaaga cccctgtaaa agagcccaac agtgaaaatg tagatatcag cagtggagga 120
ggcgtgacag gctggaagag caaatgctgc tgagcattct cctgttccat cagttgccat 180
ccactacccc gttttctctt cttgctgcaa aataaaccac tctgtccatt tttaactcta 240
aacagatatt ttgttttctc atcttaacta tccaagccac ctatttttatt tgttctttca 300
tctgtgactg cttgctgact ttatcataat tttcttcaaa caaaaaaatg tatagaaaaa 360
tcatgtctgt gacttcattt ttaaatgnta cttgctcagc tcaactgcat ttcagttgtt 420
ttatagtcca gttcttatca acattnaaac ctatngcaat catttcaaat ctattctgca 480
aattgtataa gaataaaaagt tagaatttaa caattaaaaa aaaaaaaaaa aaaaaa 536

<210> 71
<211> 865
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(865)
<223> n = A,T,C or G

<400> 71
gacaaagcgt taggagaaga anagaggcag ggaanactnc ccaggcacga tggccncctt 60
cccaccagca accagcgccc cccaccagcc cccaggcccg gacgacgaag actccatcct 120
ggattaatct nacctctntc gcctgnccca ttcctacctc ggagggtggag gccggaaagg 180
tcncaccaag aganaanctg ctgccaacac caaccgcccc agccctggcg ggcacganag 240
gaaactggtg accaatctgc agaattctna gaggaanaag cnagggggccc cgcgctnaga 300
cagagctgga tatgangcca gaccatggac nctacncccn ncaatncana cgggactgcg 360
gaagatggan gaccncgac nngatcaggc cngctnncca nccccccacc cctatgaatt 420
attcccgtctg aangaatctc tgannggctt ccannaaagc gcctccccnc cnaacgnaan 480
tncaacatng ggattanang ctgggaactg naaggggcaa ancctnnaat atccccagaa 540
acaanctctc cnaanaaaac tggggcncct catnggtggn accaactatt aactaaaccg 600
cacgccaagn aantataaaa ggggggcccc tcncggnng accccctttt gtcccttaat 660
ganggttata cnccttgctg accatggtnc ccnntttctgt ntgnatgttt ccnctcccct 720
ccncttatnt cnagccgaac tcnnatttnc ccgggggtgc nactnantng tncncttttn 780
ttngttgncc cngccctttc cgnccggaacn cgtttccccc ttantaacgg caccgggggn 840
aagggtgntt ggccccctcc ctccc 865

<210> 72
<211> 560
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(560)

<223> n = A,T,C or G

<400> 72

cctggacttg	tcttggttcc	agaacctgac	gacccggcga	cggcgacgtc	tcttttgact	60
aaaagacagt	gtccagtgtc	ccngcctagg	agtctacggg	gaccgcctcc	cgcgccgcca	120
ccatgcccac	cttctctggc	aaactggaaaa	tcatccgatc	ggaaaacttc	gangaattgc	180
tчнаantgct	gggggtgaat	gtgatgctna	ngaanattgc	tgtggctgca	gcgtccaagc	240
cagcagtgga	gacnaacag	gagggagaca	ctttctacat	caaaacctcc	accaccgtgc	300
gcaccacaaa	gattaacttc	nnngttgggg	aggantttga	ggancaaact	gtggatngga	360
ngcctgtnaa	aacctggtga	aatgggagaa	tganaataaa	atggtctgtg	ancanaaact	420
cctgaaagga	gaaggccccc	anaactcctg	gaccngaaaa	actgaccenc	cnatngggga	480
actgatnctt	gaacctgaa	cgggcgggat	ganccttttt	tnttgccncc	naanggggtc	540
tttcnctttc	ccccaaaaaa					560

<210> 73

<211> 379

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(379)

<223> n = A,T,C or G

<400> 73

ctggggancc	ggcggtnngc	nccatntcnn	gncgcgaagg	tggcaataaa	aancncctga	60
aaccgcncac	naaacatgcc	naagatatgg	acgaggaaga	tngngctttc	nngnacaanc	120
gnanngagga	acanaacaaa	ctcnangagc	tctcaagcta	atgccgcggg	gaagggggccc	180
ttggccacnn	gtggaattaa	gaaatctggc	aaanngtann	tgttccttgt	gcctnangag	240
ataaangacc	ctttatttca	tctgtattta	aacctctctn	ttccctgnca	taacttcttt	300
tnccacgtan	agntggaant	anttgttgtc	ttggactgtt	gtncatttta	gannaaactt	360
ttgttcaaaa	aaaaaataa					379

<210> 74

<211> 437

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(437)

<223> n = A,T,C or G

<400> 74

actagttcag	actgccacgc	caacccccaga	aaatacccca	catgccagaa	aagtgaagtc	60
ctaggtgttt	ccatctatgt	ttcaatctgt	ccatctacca	ggcctcgcca	taaaaacaaa	120
acaaaaaac	gctgccaggt	tttanaagca	gttctggctc	caaaaccatc	aggatcctgc	180
caccagggtt	cttttgaaat	agtaccacat	gtaaaaggga	atttggcttt	cacttcatct	240
aatcactgaa	ttgtcaggct	ttgattgata	attgtagaaa	taagtagcct	tctgttggtg	300
gaataagtta	taatcagtat	tcatctcttt	gttttttgct	actcttttct	ctctnattgt	360
gtcatttgta	ctgtttgaaa	aatatttctt	ctataaaaatt	aaactaacct	gccttaaaaa	420
aaaaaaaaaa	aaaaaaaa					437

<210> 75

CTGTTTCAAAA

<211> 579
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(579)
 <223> n = A,T,C or G

<400> 75

ctccgtcgcc	gccaaagatga	tgtgcggggc	gccctccgcc	acgcagccgg	ccaccgccga	60
gacccagcac	atcgccgacc	aggtagagtc	ccagcttgaa	gagaaagaaa	acaagaagtt	120
ccctgtgttt	aaggccgtgt	cattcaagag	ccaggtggtc	gcggggacaa	actacttcat	180
caaggtgcac	gtcggcgacg	aggacttcgt	acacctgcga	gtgttccaat	ctctccctca	240
tgaaaacaag	cccttgacct	tatctaacta	ccagaccaac	aaagccaagc	atgatgagct	300
gacctatttc	tgatctgac	tttggaacag	gcccttcagc	cagaagactg	acaaagtcac	360
cctccgtcta	ccagagcgtg	cacttgtgat	cctaaaataa	gcttcacctc	cgggctgtgc	420
ccttggggtg	gaaggggcan	gatctgcact	gcttttgcac	ttctcttcc	aaatttcatt	480
gtgttgattc	tttccctcca	ataggtgatc	tttattactt	tcagaatatt	ttccaaatna	540
gatatatatt	naaaatcctt	aaaaaaaaaa	aaaaaaaaaa			579

<210> 76
 <211> 666
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(666)
 <223> n = A,T,C or G

<400> 76

gtttatccta	tctctccaac	cagattgtca	gctccttgag	ggcaagagcc	acagtatatt	60
tcctgttttc	ttccacagtg	cctaataata	ctgtggaact	aggttttaat	aattttttta	120
ttgatgttgt	tatgggcagg	atggcaacca	gaccattgtc	tcagagcagg	tgctggctct	180
ttcctggcta	ctccatgttg	gctagcctct	ggtaacctct	tacttattat	cttcaggaca	240
ctcactacag	ggaccaggga	tgatgcaaca	tccttgtctt	tttatgacag	gatgtttgct	300
cagcttctcc	aacaataaaa	agcacgtggt	aaaacacttg	cggatattct	ggactgtttt	360
taaaaaatat	acagtttacc	gaaaatcata	ttatcttaca	atgaaaagga	ntttatagat	420
cagccagtg	acaacctttt	cccaccatac	aaaaattcct	tttcccgaan	gaaaanggct	480
ttctcaataa	ncctcacttt	cttaanatct	tacaagatag	ccccganatc	ttatcgaaac	540
tcatttttagg	caaatatgan	ttttattgtn	cgttacttgt	ttcaaaattt	ggtattgtga	600
atatcaatta	ccacccccat	ctcccatgaa	anaaanggga	aanggtgaan	ttcntaancg	660
cttaaa						666

<210> 77
 <211> 396
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(396)
 <223> n = A,T,C or G

<400> 77
 ctgcagcccg ggggatccac taatctacca nggttatattg gcagctaatt ctanatttgg 60
 atcattgccc aaagttgcac ttgctgggtct cttgggattt ggccttgga aggtatcata 120
 catanganta tgccanaata aattccattt ttttgaaaat canctccntg gggctgggtt 180
 tgggtccacag cataacangc actgcctcct tacctgtgag gaatgcaaaa taaagcatgg 240
 attaagtgag aagggagact ctgagccttc agcttcctaa attctgtgtc tgtgactttc 300
 gaagtttttt aaacctctga atttgtacac atttaaaatt tcaagtgtac tttaaaataa 360
 aatacttcta atgggaacaa aaaaaaaaaa aaaaaa 396

<210> 78
 <211> 793
 <212> DNA
 <213> Homo. sapien

<220>
 <221> misc_feature
 <222> (1)...(793)
 <223> n = A,T,C or G

<400> 78
 gcctcctagc cgccgactca cacaaggcag gtgggtgagg aaatccagag ttgccatgga 60
 gaaaattcca gtgtcagcat tcttgctcct tgtggccctc tctacactc tggccagaga 120
 taccacagtc aaacctggag ccaaaaagga cacaaggac tctcgaccca aactgcccc 180
 gaccctctcc agaggttggg gtgaccaact catctggact cagacatatg aagaagctct 240
 atataaatcc aagacaagca acaaaccctt gatgattatt catcacttgg atgagtggcc 300
 acacagtcna gctttaaaaga aagtgtttgc tgaaaataaa gaaatccaga aattggcaga 360
 gcagtttgtc ctcctcaatc tggtttatga aacaactgac aaacaccttt ctcctgatgg 420
 ccagtatgtc ccaggattat gtttgttgac ccattctctga cagttgaagc cgatatcctg 480
 ggaagatatt cnaaccgtct ctatgcttac aaactgcaga tacgctctgt tgcctgacac 540
 atgaaaaagc tctcaagttg ctnaaaatga attgtaagaa aaaaaatctc cagccttctg 600
 tctgtcggct tgaaaattga aaccagaaaa atgtgaaaaa tggctattgt ggaacanatn 660
 gacacctgat taggttttgg ttatgttcac cactattttt aanaaaanan nttttaaaat 720
 ttggttcaat tntctttttn aaacaatntg tttctacntt gnganctgat ttctaaaaaa 780
 aataatnttt ggc 793

<210> 79
 <211> 456
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(456)
 <223> n = A,T,C or G

<400> 79
 actagtatgg ggtgggaggc cccacccttc tcccctaggc gctgttcttg ctccaaaggg 60
 ctccgtggag agggactggc agagctgang ccacctgggg ctggggatcc cactcttctt 120
 gcagctgttg agcgaccta accactgggc atgccccac ccctgctctc cgcaccgcgt 180
 tctccccgac cccangacca ggctacttct cccctcctct tgccctccctc ctgcccctgc 240
 tgccctctgat cgtangaatt gangantgtc ccgccttgtg gctganaatg gacagtggca 300
 ggggctggaa atgggtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gcnccccccc 360
 tgcaagaccg agattgaggg aaancatgtc tgctgggtgt gaccatgttt cctctccata 420

CGCGT "CGCGT"

456

```
<210> 80
<211> 284
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(284)
<223> n = A,T,C or G
```

<400> 80

ctttgtacct	ctagaaaaga	taggtattgt	gtcatgaaac	ttgagttaa	attttatata	60
taaaactaaa	agtaatgctc	actttagcaa	cacatactaa	aattggaacc	atactgagaa	120
gaatagcatg	acctccgtgc	aaacaggaca	agcaaatttg	tgatgtgttg	attaaaaaga	180
aataaataaa	tgtgtatatg	tgtaacttgt	atgtttatgt	ggaatacaga	ttgggaaata	240
aatgtatttt	cttactgtga	aaaaaaaaaa	aaaaaaaaaa	aana		284

```
<210> 81
<211> 671
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(671)
<223> n = A,T,C or G
```

<400> 81

gccaccaaca	ttccaagcta	ccctgggtac	ctttgtgcag	tagaagctag	tgagcatgtg	60
agcaagcgg	gtgcacacgg	agactcatcg	ttataattta	ctatctgcc	agagtggaaa	120
gaaaggctgg	ggatatattg	gttggtctgg	ttttgatttt	ttgcttgttt	gttgtttttg	180
tactaaaaca	gtattatctt	ttgaatatcg	tagggacata	agtatataca	gtttatccaa	240
tcaagatggc	tagaatgggtg	cctttctgag	tgtctaaaac	ttgacacccc	tggtaaatct	300
ttcaacacac	ttccactgcc	tgcgtaatga	agttttgatt	catttttaac	cactggaatt	360
tttcaattgc	gtcattttca	gttagatnat	tttgcacttt	gagattaaaa	tgccatgtct	420
atttgatttag	tcttattttt	ttatttttac	aggcttatca	gtctcactgt	tggctgtcat	480
tgtgacaaa	tcaataaaac	cccnaggac	aacacacagt	atgggatcac	atattgtttg	540
acattaagct	ttggccaaaa	aatgttgcat	gtgttttacc	tcgatttgct	aaatcaatan	600
canaaaaggct	ggctnataat	gttggtgggtg	aaataattaa	tnantaacca	aaaaaaaaan	660
aaaaaaaaaaa	a					671

```
<210> 82
<211> 217
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(217)
<223> n = A,T,C or G
```

<400> 82

```

ctgcagatgt ttcttgaatg ctttgtcaaa ttaanaaaagt taaagtgcaa taatgtttga      60
agacaataag tgggtggtgta tcttggttct aataagataa acttttttgt ctttgcttta      120
tcttattagg gagttgtatg tcagtgtata aaacatactg tgtggtataa caggcttaat      180
aaattcttta aaaggaaaaa aaaaaaaaaa aaaaaaa      217

```

```

<210> 83
<211> 460
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(460)
<223> n = A,T,C or G

```

```

<400> 83
cgcgagtggg agcaccagga tctcgggctc ggaacgagac tgcacggatt gttttaagaa      60
aatggcagac aaaccagaca tgggggaaat cgccagcttc gatnaggcca agctgaanaa      120
aacggagacg caggagaaga acaccctgcc gaccaaagag accattgagc angagaagcg      180
gagtgaattt tcctaagatc ctggaggatt tcctaccccc gtccctcttcg agaccccagt      240
cgtgatgtgg aggaagagcc acctgcaaga tggacacgag ccacaagctg cactgtgaac      300
ctgggcactc cgcgccgatg ccaccggcct gtgggtctct gaagggaccc cccccaatcg      360
gactgccaaa ttctccggtt tgccccggga tattatacaa nattatttgt atgaataatg      420
annataaaac acacctcgtg gcancaaana aaaaaaaaaa      460

```

```

<210> 84
<211> 323
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(323)
<223> n = A,T,C or G

```

```

<400> 84
tgggtgatct tggctctgtg gagctgctgg gacgggatct aaaagactat tctggaagct      60
gtgggtccaan gcattttgct ggcttaacgg gtcccgaac aaaggacacc agctctctaa      120
aattgaagtt tacccganat aacaatcttt tgggcagaga tgcctatttt aacaaacncc      180
gtccctgcgc aacaacnaac aatctctggg aaataccggc catgaacntg ctgtctcaat      240
cnancatctc tctagctgac cgatcatatc gtcccagatt actacanatc ataataattg      300
atttctctga naaaaaaaaaa aaa      323

```

```

<210> 85
<211> 771
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(771)
<223> n = A,T,C or G

```

```

<400> 85

```

```

aaactgggta ctcaacactg agcagatctg ttctttgagc taaaaacat gtgctgtacc      60
aanagtttgc tcctggctgc tttgatgtca gtgctgtac  tccacctctg cggcgaatca      120
gaagcaagca actttgactg ctgtcttgga tacacagacc gtattcttca tcctaaatctt      180
attgtgggct tcacacggca gctggccaat gaaggctgtg acatcaatgc tatcatcttt      240
cacacaaaga aaaagttgtc tgtgtgcgca aatccaaaac agacttgggt gaaatatatt      300
gtgctgtctc tcagtaaaaa agtcaagaac atgtaaaaac tgtggctttt ctggaatgga      360
attggacata gccaagaac agaaagaact tgctggggtt ggaggtttca cttgcacatc      420
atgganggtt tagtgcttat cttatttgtg cctcctggac ttgtccaatt natgaagtta      480
atcatattgc atcatanttt gctttgttta acatcacatt naaattaaac tgtattttat      540
gttattttata gctntaggtt ttctgtgttt aactttttat acnaantttc ctaaactatt      600
ttggtntant gcaanttaaa aattatattt ggggggggaa taaatattgg antttctgca      660
gccacaagct ttttttaaaa aaccantaca nccnngttaa atggtnngtc ccnaatgggt      720
tttgcttttn antagaaaat ttnttagaac natttgaaaa aaaaaaaaaa a          771

```

<210> 86

<211> 628

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(628)

<223> n = A,T,C or G

<400> 86

```

actagtttgc ttacatcttt tgaaaagtat tttttttgtc caagtgccta tcaactaaac      60
cttgtgttag gtaagaatgg aatttatata gtgaatcagt gtgacccttc ttgtcataag      120
attatcttaa agctgaagcc aaaatatgct tcaaaagaaa angactttat tgttcattgt      180
agttcataca ttcaaagcat ctgaactgta gtttctatag caagccaatt acatccataa      240
gtggagaang aaatagatta atgtcnaagt atgattgggt gagggagcaa ggttgaagat      300
aatctggggt tgaaattttc tagttttcat tctgtacatt tttagttnga catcagattt      360
gaaatattaa tgtttacctt tcaatgtgtg gtatcagctg gactcantaa caccctttc      420
ttccctnngg gatggggaat ggattattgg aaaatggaaa gaaaaaagta cttaaagcct      480
tcctttcnca gtttctggct cctaccctac tgattttancc agaataagaa aacattttat      540
catcntctgc tttattccca ttaatnaant tttgatgaat aaatctgctt ttatgcnnac      600
ccaaggaatt nagtggnttc ntenttgtt                                     628

```

<210> 87

<211> 518

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(518)

<223> n = A,T,C or G

<400> 87

```

ttttttatatt tttttagaga gtagttcagc ttttatctat aaattttattg cctgtttttat      60
tataacaaca ttatactgtt tatggtttta tacatatggt tcaaaatgta taatacatca      120
agtagtacag ttttaaaatt ttatgcttaa aacaagtttt gtgtaaaaaa tgcagatata      180
ttttacatgg caaatcaatt tttaagtcac cctaaaaaatt gatttttttt tgaaatttaa      240
aaacacattt aattttcaatt tctctcttat ataaccttta ttactatagc atggttttcca      300
ctacagttta acaatgcagc aaaattccca tttcacggta aattgggttt taagcggcaa      360

```

```

ggttaaaatg ctttgaggat cctnaatacc ctttgaactt caaatgaagg ttatggttgt 420
naattttaacc ctcatgccat aagcagaagc acaagtttag ctgcattttg ctctaaactg 480
taaaancgag cccccgttg aaaaagcaaa agggaccc 518

```

<210> 88

<211> 1844

<212> DNA

<213> Homo sapien

<400> 88

```

gagacagtga atcctagtat caaaggattt ttggcctcag aaaaagttgt tgattatattt 60
tattttatatt tatttttcga gactccgtct caaaaaaaaa aaaaaaaaaa agaatcacia 120
ggtatttgct aaagcatttt gagctgcttg gaaaaaggga agtagttgca gtagagtttc 180
ttccatcttc ttggtgcttg gaagccatat atgtgtcttt tactcaagct aaggggtata 240
agcttatgtg ttgaatttgc tacatctata ttccacatat tctcacaata agagaatttt 300
gaaatagaaa tatcatagaa catttaagaa agtttagtat aaataatatt ttgtgtgttt 360
taatcccttt gaagggatct atccaaagaa aatattttac actgagctcc ttcctacacg 420
tctcagtaac agatcctgtg ttagtctttg aaaatagctc attttttaaa tgtcagttag 480
tagatgtagc atacatatga tgtataatga cgtgtattat gttaacaatg tctgcagatt 540
ttgttagaat acaaaacatg gcctttttta taagcaaaac gggccaatga ctagaataac 600
acatagggca atctgtgaat atgtattata agcagcattc cagaaaagta gttggtgaaa 660
taattttcaa gtcaaaaagg gatatggaaa ggggaattatg agtaacctct attttttaag 720
ccttgctttt aaattaaacg ctacagccat ttaagccttg aggataataa agcttgagag 780
taataatgtt aggttagcaa aggttttagat gtatcacttc atgcatgcta ccatgatagt 840
aatgcagctc ttcgagtcac ttctggctcat tcaagatatt cacccttttg cccatagaaa 900
gcaccctacc tcacctgctt actgacattg tcttagctga tcacaagatc attatcagcc 960
tccattattc cttactgtat ataaaatata gagttttata ttttcctttc ttcgtttttc 1020
accatattca aaacctaaat ttgtttttgc agatggaatg caaagtaatc aagtgttcgt 1080
gctttcacct agaaggggtgt ggtcctgaag gaaagaggct cctaaatatc cccaccctg 1140
ggtgctcctc cttccctggt accctgacta ccagaagtca ggtgctagag cagctggaga 1200
agtgcagcag cctgtgcttc cacagatggg ggtgctgctg caacaaggct ttcaatgtgc 1260
ccatcttagg gggagaagct agatcctgtg cagcagcctg gtaagtcctg aggaggttcc 1320
attgctcttc ctgctgctgt cctttgcttc tcaacggggc tcgctctaca gtctagagca 1380
catgcagcta acttgtgcct ctgcttatgc atgagggtta aattaacaac cataaccttc 1440
atttgaagtt caaagggtga ttcaggatcc tcaaagcatt ttaaccttgc cgcttaaaac 1500
ccaatttacc gtgaaatggg aattttgctg cattgttaaa ctgtagtgga aaccatgcta 1560
tagtaataaa gggtatataa gagagaaatt gaaattaaat gtgtttttta atttcaaaaa 1620
aaaatcaatc tttaggatga cttaaaaaatt gatttgccat gtaaaatgta tctgcatttt 1680
ttacacaaaa cttgttttaa gcataaaatt ttaaaactgt actacttgat gtattataca 1740
ttttgaacca tatgtattaa accataaaca gtataatgtt gttataataa aacaggcaat 1800
aaattttata ataaaagctg aaaaaaaaaa aaaaaaaaaa aaaa 1844

```

<210> 89

<211> 523

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(523)

<223> n = A,T,C or G

<400> 89

```

tttttttttt ttttttttag caatccacat ttattgatca cttattatgt accaggcact 60

```



```

gggataaaga tgactgttag tcactcacag taaggaagaa aactagcaaa taagacgatt      120
acaatatgat gtagaaaatg ctaagccaga gatatagaaa ggtcctattg ggtccttctg      180
tcacctgtgc tttccacatc cctacccttc acaggccttc cctccagctt cctgcccccg      240
ctccccactg cagatccccct gggattttgc ctagagctaa acgagganat gggccccctg      300
gccctggcat gacttgaacc caaccacaga ctgggaaagg gagcctttcg anagtggatc      360
actttgatna gaaaacacat agggaattga agagaaantc cccaaatggc caccctgtgt      420
ggtgctcaag aaaagtttgc agaattgata aatgaaggat caagggaatt aatanatgaa      480
taattgaatg gtggctcaat aagaatgact ncnttgaatg acc                          523

```

```

<210> 90
<211> 604
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(604)
<223> n = A,T,C or G

```

```

<400> 90
ccagtgtggt ggaatgcaaa gattaccccc gaagctttcg agaagctggg attccctgca      60
gcaaaggaaa tagccaatat gtgtcgtttc tatgaaatga agccagaccg agatgtcaat      120
ctcaccacc aactaaatcc caaagtcaaa agcttcagcc agtttatctc agagaaccag      180
gggagccttc aagggcattg agaaaatcag ctgttcagat aggcctctgc accacacagc      240
ctctttcctc tctgatcctt ttctctttta cggcacaaca ttcatgtttg acagaacatg      300
ctggaatgca attgtttgca acaccgaagg atttcctgcg gtcgcctctt cagtaggaag      360
cactgcattg gtgataggac acggtaattt gattcacatt taacttgcta gttagtata      420
aggggtggta cacctgtttg gtaaaatgag aagcctcgga aacttgggag cttctctcct      480
accactaatg gggagggcag attattactg ggatttctcc tggggtgaat taatttcaag      540
ccctaattgc tgaaattccc ctnggcaggc tccagttttc tcaactgcat tgcaaaaattc      600
cccc                                              604

```

```

<210> 91
<211> 858
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(858)
<223> n = A,T,C or G

```

```

<400> 91
tttttttttt ttttttttta tgattattat tttttttatt gatctttaca tcctcagtgt      60
tggcagagtt tctgatgctt aataaacatt tgttctgata agataagtgg aaaaaattgt      120
catttcctta ttcaagccat gcttttctgt gatattctga tcctagttga acatacagaa      180
ataaatgtct aaaacagcac ctcgattctc gtctataaca ggactaagtt cactgtgata      240
ttaaataagc ttggctaaaa tgggacatga gtggaggtag tcacacttca gcgaagaaag      300
agaatctcct gtataatctc accaggagat tcaacgaatt ccaccacact ggactagtgg      360
atccccggg ctgcaggaat tcgatatcaa gcttatcgat accgtcgacc tcgagggggg      420
gcccggtacc caattcgccc tatagttagt cgtattacgc gcgctcactg gccgtcgttt      480
tacaacgtcg tgactgggaa aaccctggcg ttacccaact taatcgctt gcagcacatc      540
cccctttcgc cagctggcgt aatagcgaan agccgcacc gatcgccctt ncaacagttg      600
cgcagcctga atggcgaatg ggacgcgccc tgtagcggcg cattaaagcg cggcnggggtg      660

```

```

tggnggntcc cccacgtgac cgntacactt ggcagcgcct tacgccggtc nttecgctttc 720
ttcccttccct ttctcgcacc gttegcgggg tttccccgnn agctnttaat cggggggnctc 780
cctttanggg tncnaattaa nggnttacng gaccttngan cccaaaaact ttgattaggg 840
ggaaggtccc cgaagggg 858

```

```

<210> 92
<211> 585
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(585)
<223> n = A,T,C or G

```

```

<400> 92
gttgaatctc ctggtgagat tatacaggag attctctttc ttcgctgaag tgtgactacc 60
tccactcatg tcccatTTTA gccaaGCTTA tTTaagatca cagtgaactt agtcctgtta 120
tagacgagaa tcgaggtgct gttttagaca tttatttctg tatgttcaac taggatcaga 180
atatcacaga aaagcatggc ttgaataagg aaatgacaat tttttccact tatctgatca 240
gaacaaatgt ttattaagca tcagaaactc tgccaacact gaggatgtaa agatcaataa 300
aaaaaataat aatcatnann naaanannan nngaagggcg gccgccaccg cgggtggagct 360
ccagcttttg ttcccttttag tgaggggttaa ttgcgcgctt ggcgttaatc atgggtcatag 420
ctgtttcctg tgtgaaattg ttatccggct cacaattccn cncaacatac gagccgggaa 480
gentnangtg taaaagcctg ggggtgccta attgagttag ctnactcaca ttaattgngt 540
tgcgtccac ttgcccgctt ttccantccg ggaaacctgt tcgnc 585

```

```

<210> 93
<211> 567
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(567)
<223> n = A,T,C or G

```

```

<400> 93
cggcagtgtt gctgtctgcg tgtccacctt ggaatctggc tgaactggct gggaggacca 60
agactgcggc tgggggtggc anggaaggga accgggggct gctgtgaagg atcttggaac 120
ttccctgtac ccaccttccc cttgcttcat gtttgtanag gaaccttggt ccggccaagc 180
ccagtttccct tgtgtgatac actaatgtat ttgctttttt tgggaaatan anaaaaatca 240
attaaattgc tantgtttct ttgaannnnn nnnnnnnnnn nnnnnnnngg ggggncgccc 300
ccncgngnga aacnccccct tttgttccct ttaattgaaa ggттаattng cncncntggc 360
gttaancnt gggccaaaanc tngttncccg tgntgaaatt gttnatcccc tcccaaattc 420
cccccnnc ttccaaaccc ggaaancctn annntgttna ancccggggg gttgcctaan 480
ngnaattnaa ccnaaccccc nttaaang ngnttgcn cnacnngccc cncctttccc 540
nttcggggaa aacctntcc gtgccc 567

```

```

<210> 94
<211> 620
<212> DNA
<213> Homo sapien

```

<220>
 <221> misc_feature
 <222> (1)...(620)
 <223> n = A,T,C or G

<400> 94
 actagtcaaa aatgctaaaa taatttgga gaaaatattt ttaagtagt gttatagttt 60
 catgtttatc ttttattatg ttttgtgaag ttgtgtcttt tcactaatta cctatactat 120
 gccaatattt ccttatatct atccataaca ttatactac atttgtaana naatatgcac 180
 gtgaaactta acactttata aggtaaaaat gaggtttcca anatttaata atctgatcaa 240
 gttcttggtta tttccaaata gaatggactt ggtctgttaa gggctaagga gaagaggaag 300
 ataagggtta aagttgttaa tgaccaaaca ttctaaaaga aatgcaaaaa aaaagtttat 360
 tttcaagcct tcgaactatt taaggaaagc aaaatcattt cctaaatgca tatcatttgt 420
 gagaatttct cattaatatt ctgaatcatt catttcacta aggctcatgt tnactccgat 480
 atgtctctaa gaaagtacta tttcatggtc caaacctggt tgccatantt gggtaaaggc 540
 tttcccttaa gtgtgaaant atttaaaatg aaattttcct ctttttaaaa attctttana 600
 aggggttaagg gtgttgaggga 620

<210> 95
 <211> 470
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(470)
 <223> n = A,T,C or G

<400> 95
 ctgcaccttc tctgcacagc ggatgaaccc tgagcagctg aagaccagaa aagccactat 60
 nactttntgc ttaattcang agcttacang attcttcaaa gagtngtcc agcatccttt 120
 gaaacatgag ttcttaccag cagaacgaga cctttacccc accacctcag cttcaacagc 180
 agcaggtgaa acaacccatc cagcctccac ctnaggaaat atttgttccc acaaccaagg 240
 agccatgcca ctcaaagggt ccacaacctg naaacacaaa nattccagag ccaggctgta 300
 ccaagggtccc tgagccaggg ctgtaccaan gtccctgagc cagggtgtac caangtcctt 360
 gagccaggat gtaccaaggt ccctgancca ggttggtcaa ggtccctgag ccagggtaca 420
 ccaagggcct gngccaggca gcataangt ccctgaccaa ggcttatcaa 470

<210> 96
 <211> 660
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(660)
 <223> n = A,T,C or G

<400> 96
 tttttttttt tttttttttt ggaattaaaa gcaatttaat gagggcagag caggaaacat 60
 gcatttcttt tcattcgaat cttcagatga accctgagca gccgaagacc agaaaagcca 120
 tgaagacttt ctgcttaatt caggggctta caggattctt cagagtgtgt gtgaacaaaa 180
 gctttatagt acgtattttt aggatacaaa taagagagag actatggctt ggggtgagaa 240
 tgtactgatt acaaggtcta cagacaatta agacacagaa acagatggga agagggtgnc 300

cagcatctgg	nggttggctt	ctcaagggct	tgtctgtgca	ccaaattact	tctgcttggn	360
cttctgctga	gctgggcctg	gagtgaccgt	tgaaggacat	ggctctggta	cctttgtgta	420
gcctgncaca	ggaacttttg	tgtatccttg	ctcaggaact	ttgatggcac	ctggctcagg	480
aaacttgatg	aagccttggg	caagggacct	tgatgcttgc	tggctcaggg	accttggnn	540
ancctgggct	canggacctt	tgncncaacc	ttggcttcaa	gggaccttg	gnacatcctg	600
gcnnagggac	ccttgggncc	aaccttgggc	tnaggggacc	ctttggntnc	nanccttggc	660

<210> 97
 <211> 441
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(441)
 <223> n = A,T,C or G

gggaccatac	anagtattcc	tctcttcaca	ccaggaccag	ccactgttgc	agcatgagtt	60
cccagcagca	gaagcagccc	tgcateccac	ccccctcagct	tcagcagcag	caggtgaaac	120
agccttgcca	gcctccacct	caggaacct	gcatecccaa	aaccaaggag	ccctgccacc	180
ccaaggtgcc	tgagccctgc	caccccaaag	tgctgagcc	ctgccagccc	aaggttccag	240
agccatgcca	ccccaaagtg	cctgagccct	gcccttcaat	agtcactcca	gcaccagccc	300
agcagaanac	caagcagaag	taatgtggtc	cacagccatg	cccttgagga	gccggccacc	360
agatgctgaa	tccccatccc	cattctgtgt	atgagtccca	tttgccttgc	aattagcatt	420
ctgtctcccc	caaaaaaaaaa	a				441

<210> 98
 <211> 600
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(600)
 <223> n = A,T,C or G

gtattcctct	cttcacacca	ggaccagcca	ctgttgcagc	atgagttccc	agcagcagaa	60
gcagccctgc	atcccacccc	ctcagcttca	gcagcagcag	gtgaaacagc	cttgccagcc	120
tccacctcag	gaacctatgca	tccccaaaac	caaggagccc	tgccacccca	aggtgcctga	180
gccctgccac	cccaaagtgc	ctgagccctg	ccagcccaag	gttccagagc	catgccaccc	240
caaggtgcct	gagccctgcc	cttcaatagt	cactccagca	ccagcccagc	agaanaccaa	300
gcagaagtaa	tgtgggtccac	agccatgccc	ttgaggagcc	ggccaccana	tgctgaatcc	360
cctatcccat	tctgtgtatg	agtcccattt	gccttgcaat	tagcattctg	tctcccccaa	420
aaaagaatgt	gctatgaagc	tttctttcct	acacactctg	agtctctgaa	tgaagctgaa	480
ggtcttaant	acagancatg	ttttcagctg	ctcagaattc	tctgaagaaa	agattttaaga	540
tgaaaggcaa	atgattcagc	tccttattac	cccattaaat	tcnctttcaa	ttccaaaaaa	600

<210> 99
 <211> 667
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(667)
 <223> n = A,T,C or G

<400> 99
 actagtgact gagttcctgg caaagaaatt tgacctggac cagttgataa ctcatgtttt 60
 accattttaa aaaatcagtg aaggatttga gctgctcaat tcaggacaaa gcattcgaac 120
 ggtcctgacg ttttgagatc caaagtggca ggaggtctgt gttgtcatgg tgaactggag 180
 tttctcttgt gagagttccc tcatctgaaa tcatgtatct gtctcacaaa tacaagcata 240
 agtagaagat ttgttgaaga catagaaccc ttataaagaa ttattaacct ttataaacat 300
 ttaaagtctt gtgagcacct gggaattagt ataataacaa tgttnatatt tttgatttac 360
 attttgtaag gctataattg tatcttttaa gaaaacatac cttggatttc tatgttgaaa 420
 tggagatttt taagagtttt aaccagctgc tgcagatata ttactcaaaa cagatatagc 480
 gtataaagat atagtaaagc catctcctag agtaatatcc acttaacaca ttggaaacta 540
 ttatttttta gatttgaata tnaatgttat tttttaacaa cttgttatga gttacttggg 600
 attacatttt gaaatcagtt cattccatga tgcantattac tgggattaga ttaagaaaga 660
 cggaaaa 667

<210> 100
 <211> 583
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(583)
 <223> n = A,T,C or G

<400> 100
 gttttgtttg taagatgac acagtcattgt tacactgac taaaggacat atatataacc 60
 ctttaaaaaa aaaatcactg cctcattctt atttcaagat gaatttctat acagactaga 120
 tgtttttctg aagatcaatt agacattttg aaaatgattt aaagtgtttt ccttaatgtt 180
 ctctgaaaac aagtttcttt tgtagtttta accaaaaaag tgcccttttt gtcactggat 240
 tctcctagca ttcattgattt ttttttcata caatgaaatt aaaattgcta aaatcatgga 300
 ctggctttct gggttgattt caggtaagat gtgtttaagg ccagagcttt tctcagtatt 360
 tgattttttt ccccaatatt tgatttttta aaaatataca catnggtgct gcatttatat 420
 ctgctggttt aaaattctgt catatttcac ttctagcctt ttagttatgg caaatcatat 480
 tttactttta cttaaagcat ttggttattt ggantatctg gttctannct aaaaaaanta 540
 attctatnaa ttgaantttt ggtactcnn ccatatttga tcc 583

<210> 101
 <211> 592
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(592)
 <223> n = A,T,C or G

<400> 101
 gtggagacgt acaaagagca gccgctcaag acacctggga agaaaaagaa aggcaagccc 60
 gggaaacgca aggagcagga aaagaaaaaa cggcgaactc gctctgcctg gttagactct 120

180
240
300
360
420
480
540
592

```
<220>
<221> misc_feature
<222> (1)...(587)
<223> n = A,T,C or G
```

60
120
180
240
300
360
420
480
540
587

```
<220>
<221> misc_feature
<222> (1)...(496)
<223> n = A,T,C or G
```

60
120
180
240
300
360
420
480
496

$\langle 210 \rangle$	104
$\langle 211 \rangle$	575

<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(575)
<223> n = A,T,C or G

<400> 104

gcacctgctc	tcaatccnnc	tctcaccatg	atcctccgcc	tgcanaaact	cctctgccaa	60
ctatggangt	ggtttcnggg	gtggctcttg	ccaactggga	agaagccgtg	gtgtctctac	120
ctgttcaact	cngtttggtg	ctgggggatc	aactnngggc	tatggaagcg	gctnaactgt	180
tgttttgggtg	gaagggctgg	taattggctt	tgggaagtng	cttatngaag	ttggcctngg	240
gaagttgcta	ttgaaagtng	ccntggaagt	ngntttgggtg	gggggttttg	ctggtggcct	300
ttgttnaatt	tggtgcttt	gtnaatggcg	gccccctcnc	ctgggcaatg	aaaaaaatca	360
ccnatgcngn	aaacctcnac	nnaacagcct	gggcttccct	cacctcgaaa	aaagttgctc	420
cccccccaaa	aaaggncaan	cccctcaann	tggaangttg	aaaaaatcct	cgaatgggga	480
ncccnaaaac	aaaaancccc	ccntttcccn	gnaanggggg	aaataccncc	ccccactta	540
cnaaaaccct	tntaaaaaac	cccccgggaa	aaaaa			575

<210> 105
<211> 619
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(619)
<223> n = A,T,C or G

<400> 105

cactagtagg	atagaaacac	tgtgtcccg	gagtaaggag	agaagctact	attgattaga	60
gcctaaccce	ggttaactgc	aagaagaggc	gggatacttt	cagctttcca	tgtaactgta	120
tgcataaagc	caatgtagtc	cagtttctaa	gatcatgttc	caagctaact	gaatcccact	180
tcaatacaca	ctcatgaact	cctgatggaa	caataacagg	cccaagcctg	tggtatgatg	240
tgcacacttg	ctagactcan	aaaaaatact	actctcataa	atgggtggga	gtattttggt	300
gacaacctac	tttgcttggc	tgagtgaagg	aatgatattc	atatattcat	ttattccatg	360
gacatttagt	tagtgctttt	tatataccag	gcatgatgct	gagtgaact	cttgtgtata	420
tttccaaatt	tttgtacagt	cgctgcacat	atttgaaatc	atatattaag	acttccaaaa	480
aatgaagtcc	ctggtttttc	atggcaactt	gatcagtaaa	ggattcncct	ctggttggtg	540
cttaaaacat	ctactatatn	gttnanatga	aattcctttt	ccccnctcc	cgaaaaaana	600
aagtgggtggg	gaaaaaaa					619

<210> 106
<211> 506
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(506)
<223> n = A,T,C or G

<400> 106

```
<210> 107
<211> 452
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(452)
<223> n = A,T,C or G
```

```
<210> 108
<211> 502
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(502)
<223> n = A,T,C or G
```

<210>	109
<211>	1308
<212>	DNA

<400> 109

 $\langle 210 \rangle$ 110

<212> PRT

<213> Homo sapien

 $\langle 400 \rangle$ 110

Met 1	Asp	Ser	Leu	Gly 5	Ala	Val	Ser	Thr	Arg 10	Leu	Gly	Phe	Asp	Leu 15	Phe
Lys	Glu	Leu	Lys 20	Lys	Thr	Asn	Asp	Gly 25	Asn	Ile	Phe	Phe	Ser 30	Pro	Val
Gly	Ile	Leu 35	Thr	Ala	Ile	Gly	Met 40	Val	Leu	Leu	Gly	Thr 45	Arg	Gly	Ala
Thr	Ala 50	Ser	Gln	Leu	Glu	Glu 55	Val	Phe	His	Ser	Glu 60	Lys	Glu	Thr	Lys
Ser 65	Ser	Arg	Ile	Lys	Ala 70	Glu	Glu	Lys	Glu	Val 75	Ile	Glu	Asn	Thr 80	Glu
Ala	Val	His	Gln 85	Gln	Phe	Gln	Lys	Phe 90	Leu	Thr	Glu	Ile	Ser 95	Lys	Leu
Thr	Asn	Asp 100	Tyr	Glu	Leu	Asn	Ile	Thr 105	Asn	Arg	Leu	Phe	Gly 110	Glu	Lys
Thr	Tyr 115	Leu	Phe	Leu	Gln	Lys	Tyr 120	Leu	Asp	Tyr	Val	Glu 125	Lys	Tyr	Tyr
His	Ala 130	Ser	Leu	Glu	Pro	Val 135	Asp	Phe	Val	Asn 140	Ala	Ala	Asp	Glu	Ser
Arg 145	Lys	Lys	Ile	Asn 150	Ser	Trp	Val	Glu	Ser	Lys 155	Thr	Asn	Glu	Lys	Ile
Lys	Asp	Leu	Phe 165	Pro	Asp	Gly	Ser	Ile	Ser 170	Ser	Ser	Thr	Lys	Leu 175	Val

Leu Val Asn Met Val Tyr Phe Lys Gly Gln Trp Asp Arg Glu Phe Lys
 180 185 190
 Lys Glu Asn Thr Lys Glu Glu Lys Phe Trp Met Asn Lys Ser Thr Ser
 195 200 205
 Lys Ser Val Gln Met Met Thr Gln Ser His Ser Phe Ser Phe Thr Phe
 210 215 220
 Leu Glu Asp Leu Gln Ala Lys Ile Leu Gly Ile Pro Tyr Lys Asn Asn
 225 230 235 240
 Asp Leu Ser Met Phe Val Leu Leu Pro Asn Asp Ile Asp Gly Leu Glu
 245 250 255
 Lys Ile Ile Asp Lys Ile Ser Pro Glu Lys Leu Val Glu Trp Thr Ser
 260 265 270
 Pro Gly His Met Glu Glu Arg Lys Val Asn Leu His Leu Pro Arg Phe
 275 280 285
 Glu Val Glu Asp Ser Tyr Asp Leu Glu Ala Val Leu Ala Ala Met Gly
 290 295 300
 Met Gly Asp Ala Phe Ser Glu His Lys Ala Asp Tyr Ser Gly Met Ser
 305 310 315 320
 Ser Gly Ser Gly Leu Tyr Ala Gln Lys Phe Leu His Ser Ser Phe Val
 325 330 335
 Ala Val Thr Glu Glu Gly Thr Glu Ala Ala Ala Ala Thr Gly Ile Gly
 340 345 350
 Phe Thr Val Thr Ser Ala Pro Gly His Glu Asn Val His Cys Asn His
 355 360 365
 Pro Phe Leu Phe Phe Ile Arg His Asn Glu Ser Asn Ser Ile Leu Phe
 370 375 380
 Phe Gly Arg Phe Ser Ser Pro
 385 390

<210> 111

<211> 1419

<212> DNA

<213> Homo sapien

<400> 111

ggagaactat	aaattaagga	tcccagctac	ttaattgact	tatgcttcct	agttcgttgc	60
ccagccacca	ccgtctctcc	aaaaaccgga	ggtctcgcta	aaatcatcat	ggattcactt	120
ggcgccgtca	gcaactcgact	tgggtttgat	cttttcaaag	agctgaagaa	aacaaatgat	180
ggcaacatct	tcttttcccc	tgtgggcac	ttgactgcaa	ttggcatggt	cctcctgggg	240
acccgaggag	ccaccgcttc	ccagttggag	gaggtgtttc	actctgaaaa	agagacgaag	300
agctcaagaa	taaaggctga	agaaaaagag	gtggttaagaa	taaaggctga	aggaaaagag	360
attgagaaca	cagaagcagt	acatcaacaa	ttccaaaagt	tttgactga	aataagcaaa	420
ctcactaatg	attatgaact	gaacataacc	aacaggctgt	ttggagaaaa	aacatacctc	480
ttccttcaaa	aatacttaga	ttatgttgaa	aaatattatc	atgcatctct	ggaacctggt	540
gattttgtaa	atgcagccga	tgaaagtcga	aagaagatta	attcctgggt	tgaaagcaaa	600
acaaatgaaa	aaatcaagga	cttgttccca	gatggctcta	ttagtagctc	taccaagctg	660
gtgctggtga	acatgggtta	ttttaaagg	caatgggaca	gggagtttaa	gaaagaaaat	720
actaaggaag	agaaattttg	gatgaataag	agcacaagta	aatctgtaca	gatgatgaca	780
cagagccatt	ccttttagctt	cactttcctg	gaggacttgc	aggccaaaat	tctagggatt	840
ccatataaaa	acaacgacct	aagcatgttt	gtgcttctgc	ccaacgacat	cgatggcctg	900
gagaagataa	tagataaaat	aagtcctgag	aaattggtag	agtggactag	tccagggcac	960
atggaagaaa	gaaaggtgaa	tctgcacttg	ccccggtttg	agggtggagga	cagttacgat	1020
ctagaggcgg	tcttggtctg	catggggatg	ggcgatgcct	tcagttagca	caaagccgac	1080
tactcgggaa	tgctgctcagg	ctccgggttg	tacgcccaga	agttcctgca	cagttccttt	1140

```

gtggcagtaa ctgaggaagg caccgaggct gcagctgccca ctggcatagg ctttactgtc 1200
acatccgccc caggtcacga aaatgttcac tgcaatcacc ccttcctgtt cttcatcagg 1260
cacaatgaat ccaacagcat cctcttcttc ggcagatttt cttctcctta agatgatcgt 1320
tgccatggca ttgctgcttt tagcaaaaaa caactaccag tgttactcat atgattatga 1380
aatcgtcca ttcttttaaa tgggtggctca cttgcattt 1419

```

```

<210> 112
<211> 400
<212> PRT
<213> Homo sapien

```

```

<400> 112
Met Asp Ser Leu Gly Ala Val Ser Thr Arg Leu Gly Phe Asp Leu Phe
1      5      10      15
Lys Glu Leu Lys Thr Asn Asp Gly Asn Ile Phe Phe Ser Pro Val
20     25     30
Gly Ile Leu Thr Ala Ile Gly Met Val Leu Leu Gly Thr Arg Gly Ala
35     40     45
Thr Ala Ser Gln Leu Glu Glu Val Phe His Ser Glu Lys Glu Thr Lys
50     55     60
Ser Ser Arg Ile Lys Ala Glu Glu Lys Glu Val Val Arg Ile Lys Ala
65     70     75     80
Glu Gly Lys Glu Ile Glu Asn Thr Glu Ala Val His Gln Gln Phe Gln
85     90     95
Lys Phe Leu Thr Glu Ile Ser Lys Leu Thr Asn Asp Tyr Glu Leu Asn
100    105    110
Ile Thr Asn Arg Leu Phe Gly Glu Lys Thr Tyr Leu Phe Leu Gln Lys
115    120    125
Tyr Leu Asp Tyr Val Glu Lys Tyr Tyr His Ala Ser Leu Glu Pro Val
130    135    140
Asp Phe Val Asn Ala Ala Asp Glu Ser Arg Lys Lys Ile Asn Ser Trp
145    150    155    160
Val Glu Ser Lys Thr Asn Glu Lys Ile Lys Asp Leu Phe Pro Asp Gly
165    170    175
Ser Ile Ser Ser Ser Thr Lys Leu Val Leu Val Asn Met Val Tyr Phe
180    185    190
Lys Gly Gln Trp Asp Arg Glu Phe Lys Lys Glu Asn Thr Lys Glu Glu
195    200    205
Lys Phe Trp Met Asn Lys Ser Thr Ser Lys Ser Val Gln Met Met Thr
210    215    220
Gln Ser His Ser Phe Ser Phe Thr Phe Leu Glu Asp Leu Gln Ala Lys
225    230    235    240
Ile Leu Gly Ile Pro Tyr Lys Asn Asn Asp Leu Ser Met Phe Val Leu
245    250    255
Leu Pro Asn Asp Ile Asp Gly Leu Glu Lys Ile Ile Asp Lys Ile Ser
260    265    270
Pro Glu Lys Leu Val Glu Trp Thr Ser Pro Gly His Met Glu Glu Arg
275    280    285
Lys Val Asn Leu His Leu Pro Arg Phe Glu Val Glu Asp Ser Tyr Asp
290    295    300
Leu Glu Ala Val Leu Ala Ala Met Gly Met Gly Asp Ala Phe Ser Glu
305    310    315    320
His Lys Ala Asp Tyr Ser Gly Met Ser Ser Gly Ser Gly Leu Tyr Ala
325    330    335

```

Gln Lys Phe Leu His Ser Ser Phe Val Ala Val Thr Glu Glu Gly Thr
 340 345 350
 Glu Ala Ala Ala Ala Thr Gly Ile Gly Phe Thr Val Thr Ser Ala Pro
 355 360 365
 Gly His Glu Asn Val His Cys Asn His Pro Phe Leu Phe Phe Ile Arg
 370 375 380
 His Asn Glu Ser Asn Ser Ile Leu Phe Phe Gly Arg Phe Ser Ser Pro
 385 390 395 400

<210> 113
 <211> 957
 <212> DNA
 <213> Homo sapien

<400> 113
 ctcgaccttc tctgcacagc ggatgaaccc tgagcagctg aagaccagaa aagccactat 60
 gactttctgc ttaattcagg agcttacagg attcttcaaa gagtgtgtcc agcatccttt 120
 gaaacatgag ttcttaccag cagaagcaga cctttacccc accacctcag cttcaacagc 180
 agcaggtgaa acaacccagc cagcctccac ctcaggaaat atttggtccc acaaccaagg 240
 agccatgcca ctcaaaggtt ccacaacctg gaaacacaaa gattccagag ccaggctgta 300
 ccaaggtccc tgagccaggc tgtaccaagg tccctgagcc aggttggtacc aaggtccctg 360
 agccaggatg taccaaggtc cctgagccag gttgtacca ggtccctgag ccaggctaca 420
 ccaaggtccc tgagccaggc agcatcaagg tccctgacca aggttctatc aagtttcctg 480
 agccaggtgc catcaaagtt cctgagcaag gatacaccaa agttcctgtg ccaggctaca 540
 caaaggtacc agagccatgt ccttcaacgg tcaactccagg cccagctcag cagaagacca 600
 agcagaagta atttggtgca cagacaagcc cttgagaagc caaccaccag atgctggaca 660
 cctcttctcc atctgtttct gtgtcttaat tgtctgtaga ccttgtaatc agtacattct 720
 caccccaagc catagtctct ctcttatttg tatectaaaa atacggtact ataaagcttt 780
 tgttcacaca cactctgaag aatcctgtaa gccctgaat taagcagaaa gtcttcatgg 840
 cttttctggt cttcggtctg tcagggttca tctgaagatt cgaatgaaaa gaaatgcatg 900
 tttcctgctc tgccctcatt aaattgcttt taattccaaa aaaaaaaaaa aaaaaaa 957

<210> 114
 <211> 161
 <212> PRT
 <213> Homo sapien

<400> 114
 Met Ser Ser Tyr Gln Gln Lys Gln Thr Phe Thr Pro Pro Pro Gln Leu
 1 5 10 15
 Gln Gln Gln Gln Val Lys Gln Pro Ser Gln Pro Pro Pro Gln Glu Ile
 20 25 30
 Phe Val Pro Thr Thr Lys Glu Pro Cys His Ser Lys Val Pro Gln Pro
 35 40 45
 Gly Asn Thr Lys Ile Pro Glu Pro Gly Cys Thr Lys Val Pro Glu Pro
 50 55 60
 Gly Cys Thr Lys Val Pro Glu Pro Gly Cys Thr Lys Val Pro Glu Pro
 65 70 75 80
 Gly Cys Thr Lys Val Pro Glu Pro Gly Cys Thr Lys Val Pro Glu Pro
 85 90 95
 Gly Tyr Thr Lys Val Pro Glu Pro Gly Ser Ile Lys Val Pro Asp Gln
 100 105 110
 Gly Phe Ile Lys Phe Pro Glu Pro Gly Ala Ile Lys Val Pro Glu Gln
 115 120 125

Gly Tyr Thr Lys Val Pro Val Pro Gly Tyr Thr Lys Val Pro Glu Pro
 130 135 140
 Cys Pro Ser Thr Val Thr Pro Gly Pro Ala Gln Gln Lys Thr Lys Gln
 145 150 155 160
 Lys

<210> 115
 <211> 506
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(506)
 <223> n = A,T,C or G

<400> 115
 cattggtinct ttcatattgct ntggaagtgt nnatctctaa cagtggacaa agttcccngt 60
 gccttaaact ctgtnacact tttgggaant gaaaanttng tantatgata ggattattctg 120
 angtanagat gttctggata ccattanatn tgccccngt gtcagaggct catatttgtgt 180
 tatgtaaagt gtatntcatt cgctactatn antcaattng aaatanggtc tttgggttat 240
 gaatantnng cagcncanct nanangctgt ctgtngtatt cattgtgggtc atagcacctc 300
 acancattgt aacctcnatc nagtgagaca nactagnaan ttcttagtga tggctcanga 360
 ttccaaatgg nctcatntcn aatgtttaaa agttanttaa gtgtaagaaa tacagactgg 420
 atgttccacc aactagtacc tgtaatgaen ggcctgtccc aacacatctc ccttttccat 480
 gactgtggta nccgcgcatcg gaaaaa 506

<210> 116
 <211> 3079
 <212> DNA
 <213> Homo sapien

<400> 116
 ggatccccgg gtttctctaaa cccccacag agtcctgccc aggccaaaga gcaaggaaaa 60
 ggtcaaaggg cagaaaaaat gctgagttag gaggagctat ggaaggataa acctggcctt 120
 aaagagggtca aagtgggttta tagggggcgc tgagggtctc ccacattctc tggcctaaac 180
 ctgacaggca gatctgcccga gtgggctctg ggatagctgt gccttcccta acaaaaaaat 240
 tgtgcacaaa aggatgaaac tctattttcc ctctagcaca taaccaagaa tataaggcta 300
 cagattgcct ttcccagagg gaaaaccctg cagcaacctg ctgcctggaa aagtgtgaga 360
 gcagatcact ggggaatcgt ttgcccccg ctgatggaca gcttcccca gctccaaggg 420
 cagggtgctca gcatgtaccg tactgggatg gttgtcaata ctctgggtcc tgtaagagtc 480
 ccaggacact gccatgccaa tgccccctca gttcctggca tccttttttg gctgctcaca 540
 gccccagcct ctatggtgaa gacatacttg ctagcagcgt caccaacttg ttgccaagag 600
 atcagtgtct gaaggcaagg ttatttctaa ctgagcagag cctgccagga agaaagcgtt 660
 tgcacccac accactgtgc aggtgtgacc ggtgagctca cagctgcccc ccaggcatgc 720
 ccagcccact taatcatcac agctcgacag ctctctcgcc cagcccagtt ctggaaggga 780
 taaaaagggg catcacctgt cctgggtaac agagccacct tctgcgtcct gctgagctct 840
 gttctctcca gcacctccca acccactagt gcctgggtct cttgctccac caggaacaag 900
 ccaccatgtc tcgccagtca agtgtgtctt ccggagcggg gggcagtcgt agcttcagca 960
 ccgctctgc catcaccccg tctgtctccc gcaccagctt cacctccgtg tcccggtcgg 1020
 ggggtggcgg tgggtggggc ttcggcaggg tcagccttgc ggggtgcttg ggagtgggtg 1080
 gctatggcag ccggagcctc tacaacctgg ggggtccaa gaggatatcc atcagacta 1140
 gtgggtggcag cttcagggaac cggtttggtg ctggtgctgg aggcggctat ggctttggag 1200

gtgggtgccg	tagtggattt	ggtttcggcg	gtggagctgg	tgggtggcttt	gggctcggtg	1260
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gtatccaaga	ggtcactgtc	aaccagagtc	tcctgactcc	cctcaacctg	caaatcgacc	1380
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ctgacacctc	agtggctctc	tccatggaca	acaaccgcaa	cctggacctg	gatagcatca	1920
tcgctgaggt	caaggcccgag	tatgaggaga	ttgccaaaccg	cagccggaca	gaagccgagt	1980
cctggatatca	gaccaagtat	gaggagctgc	agcagacagc	tggccggcat	ggcgtagacc	2040
tccgcaacac	caagcatgag	atctctgaga	tgaaccggat	gatccagagg	ctgagagccg	2100
agattgacaa	tgtcaagaaa	cagtgcgcca	atctgcagaa	cgccattgctg	gatgccgagc	2160
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gagggctggg	ggtgggcttt	ggcagtggcg	ggggtagcag	ctccagcgtc	aaatttgtct	2640
ccaccacctc	ctctccccgg	aagagcttca	agagctaaga	acctgctgca	agtcactgcc	2700
ttccaagtgc	agcaacccag	cccatggaga	ttgcctcttc	taggcagttg	ctcaagccat	2760
gttttatcct	tttctggaga	gtagtctaga	ccaagccaat	tgcagaacca	cattcttttg	2820
ttcccaggag	agccccattc	ccagcccctg	gtctcccgtg	ccgcagttct	atattctgct	2880
tcaaatcagc	cttcagggtt	cccacagcat	ggcccctgct	gacacgagaa	cccaaagtgt	2940
tcccaaatct	aaatcatcaa	aacagaatcc	ccaccccaat	cccaaatttt	gttttggttc	3000
taactacctc	cagaatgtgt	tcaataaaat	gttttataat	ataagctggg	gtgcagaatt	3060
gttttttttt	tctacccaa					3079

<210> 117

<211> 6921

<212> DNA

<213> Homo sapien

<400> 117

gaattctgac	tgtccactca	aaacttctat	tccgatcaaa	gctatctgtg	actacagaca	60
aattgagata	accattttaca	aagacgatga	atgtgtttttg	gcgaataact	ctcatcgtgc	120
taaattggaag	gtcatttagtc	ctactgggaa	tgaggctatg	gtcccatctg	tgtgcttcac	180
cgttcctcca	ccaaacaaag	aagcgggtga	ccttgccaac	agaattgagc	aacagtatca	240
gaatgtcctg	actctttggc	atgagtctca	cataaacatg	aagagtgtag	tatcctggca	300
ttatctcatc	aatgaaattg	atagaattcg	agctagcaat	gtggcttcaa	taaagacaat	360
gctacctggg	gaacatcagc	aagttctaa	taatctacaa	tctcgttttg	aagattttct	420
ggaagatagc	caggaatccc	aagtcttttc	aggctcagat	ataacacaac	tggaaaagga	480
ggttaatgta	tgtaaagcagt	attatcaaga	acttctttaa	tctgcagaaa	gagaggagca	540
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<210> 120

<211> 587

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(587)

<223> n = A,T,C or G

<400> 120

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gacactgccc	attccctctc	agggcagctc	angtcacccn	ggnetcttga	accagcctg	420
ttcctttgaa	aaagggcaaa	actgaaaagg	gcttttctta	naaaaagaaa	aaccagggaa	480
ctttgccagg	gcttcnntnt	tacaaaaacn	ncttctcnng	gatttttaat	tccccattng	540
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<210> 121

<211> 619

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(619)

<223> n = A,T,C or G

<400> 121

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gacatttagt	tagtgctttt	tatataccag	gcacatgct	gagtgacact	cttgtgtata	420
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aatgaagtcc	ctggtttttc	atggcaactt	gatcagtaaa	ggattcncct	ctgttttggt	540

cttaaaacat ctactatatn gttnanatga aattcctttt cccncctcc cgaaaaaana 600
aagtgggtggg gaaaaaaaaa 619

<210> 122
<211> 1475
<212> DNA
<213> Homo sapien

<400> 122

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<210> 123
<211> 2294
<212> DNA
<213> Homo sapien

<400> 123

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<210> 124

<211> 956

<212> DNA

<213> Homo sapien

<400> 124

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<210> 125

<211> 486

<212> DNA

<213> Homo sapien

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<220>
<221> misc_feature
<222> (1)...(486)
<223> n = A,T,C or G
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tctgttttagc	cagtgttacc	aaggtaagct	ggggaatgaa	gtataccaac	ttctttcaga	300
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<210> 126
<211> 3552
<212> DNA
<213> Homo sapien
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<400> 126						
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<211> 754

<212> DNA

<213> Homo sapien

<400> 127

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<211> 374

<212> DNA

<213> Homo sapien

<400> 128

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<210> 129

<211> 546

<212> DNA

<213> Homo sapien

<400> 129

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<211> 5156

<212> DNA

<213> Homo sapien

<400> 130

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 <212> DNA
 <213> Homo sapien

<400> 131

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 <212> DNA
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<400> 134

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<400> 135

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<210> 136

<211> 356

<212> DNA

<213> Homo sapien

<400> 136

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agtgtacttt	cagacaacca	caaggatgac	tgatgtagac	agaaatggca	ccactgctta	240
tgaaggaaac	tggaacccag	aagcacaccc	tcccctcatt	caccatgagc	atcatgagga	300
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<210> 137

<211> 356

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(356)

<223> n = A,T,C or G

<400> 137

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ctatgtctcc	cagcaaggac	agaaactcag	aaaaatcaat	cttcttatcc	tcattcttgt	180
cctttttctc	aaagacatcg	gcgaggtaat	ttgtgccctt	tttacctcgg	cccgcgacca	240
cgctaaggcc	aaanttccag	acanayggcc	gggccgggtnc	nataggggan	cccaacttgg	300
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<210> 138

<211> 353

<212> DNA

<213> Homo sapien

<400> 138

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tacattgatg	tggaatttgc	tgctgctacc	accacctcct	gaagaggctt	ccctgatgcc	180
aatgccagcc	atcttggcat	cctggccctc	gagcaggctg	cggttaagtag	cgatctcctg	240
ctccagccgt	gtctttatgt	caagcagcat	cttggtactcc	tggttctgag	cctccatctc	300
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<210> 139

<211> 371

<212> DNA

<213> Homo sapien

<400> 139

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agccttgga	aggctactga	aaaatcttca	attggattat	gttgacctct	accttattca	180
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actatttgac	acagtggatc	tctgtgccac	gtgggaggcc	gtggagaagt	gtaaagatgc	300
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actagtggat	c					371

<210> 140
 <211> 370
 <212> DNA
 <213> Homo sapien

<400> 140
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 tgggagccag ggcagatggt gcattccttt gtgtccctgt aaatgtggga ctacaagaag 120
 aggagctgcc tgagtgggtac tttctcttcc tggtaatcct ctggcccagc ctcatggcag 180
 aatagaggta tttttaggct atttttgtaa tatggcttct ggtcaaaatc cctgtgtagc 240
 tgaattccca agccctgcat tgtacagccc cccactcccc tcaccaccta ataaaggaat 300
 agttaacact caaaaaaaaa aaaaaacctg cccggggcggc cgctcgaaag ccgaattcca 360
 gcacactggc 370

<210> 141
 <211> 371
 <212> DNA
 <213> Homo sapien

<400> 141
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 aaggagcttc aggggtcctgg tactcctcca cagaatactc ggagtattca gagtactcat 180
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 cgatgaactg gccctggcag gcacagtgtc gactcatctc ttggcgacct gcccgggcgg 360
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<210> 142
 <211> 343
 <212> DNA
 <213> Homo sapien

<400> 142
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 aacacccttt ttgtagaatc tacaggtgga catttagagt gct 343

<210> 143
 <211> 354
 <212> DNA
 <213> Homo sapien

<400> 143
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 aaattccatc atcacttttg acaggagtta attaaagaaa tgaccaagct cagttcaatg 240
 agcaaattct catactgttt ctttcttttt tttttcatta ctgtgttcaa ttatctttat 300
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<210> 144
 <211> 353
 <212> DNA
 <213> Homo sapien

<400> 144
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 gttaagttgc ttaactttca ttctgtctta cgatagtctt cagaggtggg aacagatgaa 240
 gaaaccatgc cccagagaag gttaagtgc ttctcttcta tggagccagt gttccaacct 300
 aggtttgcct gataccagac ctgtggcccc acctcccatg caggtctctg tgg 353

<210> 145
 <211> 371
 <212> DNA
 <213> Homo sapien

<400> 145
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 aatgcaaaact gcaagaatca aagccaaggc caagagggat gccaatga tcagccattc 240
 tgggaatttg ggtgtcctta taggaccaga ggttgtgttt gctccacctt cttgactccc 300
 atgtgagacc tcggccgcga ccacgctaag ccgaattcca gcacactggc ggcccgttac 360
 tagtggatcc g 371

<210> 146
 <211> 355
 <212> DNA
 <213> Homo sapien

<400> 146
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<210> 147
 <211> 355
 <212> DNA
 <213> Homo sapien

<400> 147
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 tgacttttta ggttggctga tccatcaatc ttgcactcaa ctgttacttc ttccccagtg 180
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 tttttcccat aatatgggaa atattttaag tctatcattc cattatgagg ataaactgct 300
 acatttggtat tatcttcatt ctttgaacaa caatctatcc ttggcactcc ttcat 355

<210> 148

<211> 369
 <212> DNA
 <213> Homo sapien

<400> 148
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 agggagtgtg ccgagggctt ctgagaaggt ttctctcaca tctagaaaga agcgcttaag 180
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<210> 149
 <211> 620
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(620)
 <223> n = A,T,C or G

<400> 149
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 gccaatattt ccttataatc atccataaca tttatactac atttgtaana naatatgcac 180
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 aggggttaagg gtgttgggga 620

<210> 150
 <211> 371
 <212> DNA
 <213> Homo sapien

<400> 150
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<210> 151
 <211> 4655
 <212> DNA
 <213> Homo sapien

<400> 151

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<213> Homo sapien

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 Gly Ser Ser Ser Thr Ser Pro Tyr Asn Thr Asp His Ala Gln Asn Ser
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 Lys Thr Cys Pro Ile Gln Ile Lys Val Met Thr Pro Pro Pro Gln Gly
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 Glu Val Val Lys Arg Cys Pro Asn His Glu Leu Ser Arg Glu Phe Asn
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 Glu Gly Gln Ile Ala Pro Ser Ser His Leu Ile Arg Val Glu Gly Asn

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Thr	Ile	Glu	Thr	Tyr	Arg	Gln	Gln	Gln	Gln	Gln	Gln	His	Gln	His	Leu		
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Ala	Ser	Thr	Val	Ser	Val	Gly	Ser	Ser	Glu	Thr	Arg	Gly	Glu	Arg	Val		
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Arg	Asp	Glu	Trp	Asn	Asp	Phe	Asn	Phe	Asp	Met	Asp	Ala	Arg	Arg	Asn		
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Lys	Gln	Gln	Arg	Ile	Lys	Glu	Glu	Gly	Glu								
			580					585									

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<400> 153

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<210> 154
 <211> 2148
 <212> DNA
 <213> Homo sapien

<400> 154

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cacctgggtc	tgaagcacgt	ggtgtacagc	ggcctggaga	acgtcaagcg	actgacggat	360
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<210> 155

<211> 153

<212> PRT

<213> Homo sapien

<400> 155

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Trp Arg Pro Val Lys Ala Ser Asp Gly Asp Tyr Tyr Thr Leu Ala Val
20        25        30
Pro Met Gly Asp Val Pro Met Asp Gly Ile Ser Val Ala Asp Ile Gly
35        40        45
Ala Ala Val Ser Ser Ile Phe Asn Ser Pro Glu Glu Phe Leu Gly Lys
50        55        60
Ala Val Gly Leu Ser Ala Glu Ala Leu Thr Ile Gln Gln Tyr Ala Asp
65        70        75        80
Val Leu Ser Lys Ala Leu Gly Lys Glu Val Arg Asp Ala Lys Ile Thr
85        90        95
Pro Glu Ala Phe Glu Lys Leu Gly Phe Pro Ala Ala Lys Glu Ile Ala
100       105       110
Asn Met Cys Arg Phe Tyr Glu Met Lys Pro Asp Arg Asp Val Asn Leu
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Thr His Gln Leu Asn Pro Lys Val Lys Ser Phe Ser Gln Phe Ile Ser
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Glu Asn Gln Gly Ala Phe Lys Gly Met
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<210> 156
<211> 128
<212> PRT
<213> Homo sapien

<400> 156
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Trp Arg Pro Val Lys Ala Ser Asp Gly Asp Tyr Tyr Thr Leu Ala Val
20 25 30
Pro Met Gly Asp Val Pro Met Asp Gly Ile Ser Val Ala Asp Ile Gly
35 40 45
Ala Ala Val Ser Ser Ile Phe Asn Ser Pro Glu Glu Phe Leu Gly Lys
50 55 60
Ala Val Gly Leu Ser Ala Glu Ala Leu Thr Ile Gln Gln Tyr Ala Asp
65 70 75 80
Val Leu Ser Lys Ala Leu Gly Lys Glu Val Arg Asp Ala Lys Thr Ile
85 90 95
Cys Ala Ile Asp Asp Gln Lys Thr Val Glu Glu Gly Phe Met Glu Asp
100 105 110
Val Gly Leu Ser Trp Ser Leu Arg Glu His Asp His Val Ala Gly Ala
115 120 125

<210> 157
<211> 424
<212> DNA
<213> Homo sapien

<220>
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aattcagtca ccactgttat attaccttct ccaggaaccc tccagtgggg aaggctgcga 180
tattagattt ccttgatgca aaagtttttg ttgaaagctg tgctcagagg aggtgagagg 240
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agcccagaaa cttctctgcn gnatctggct tgtccatctg gtctaagggtg gctgcttctt 360
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tgct 424

<210> 158
<211> 2099
<212> DNA
<213> Homo sapien

<400> 158
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agcccagaaa cttctctgcn gnatctggct tgtccatctg gtctaagggtg gctgcttctt 360
ccccagccat cgagtcagtt tgtgcccatt aataatacac gacctgctat ttcccatgac 420
tgct 424


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caaacggggc tgacctccct tcctggggag caggaagggt caggggaagga aaagaagtac 300
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<210> 159

<211> 291

<212> PRT

<213> Homo sapien

<400> 159

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 20          25          30
Val Met Ile Leu Val Val Ala Ala Gln Glu Val Trp Gly Asp Glu Gln
 35          40          45
Glu Asp Phe Val Cys Asn Thr Leu Gln Pro Gly Cys Lys Asn Val Cys
 50          55          60
Tyr Asp His Phe Phe Pro Val Ser His Ile Arg Leu Trp Ala Leu Gln
 65          70          75          80
Leu Ile Phe Val Ser Thr Pro Ala Leu Leu Val Ala Met His Val Ala
 85          90          95
Tyr Tyr Arg His Glu Thr Thr Arg Lys Phe Arg Arg Gly Glu Lys Arg
100          105          110

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Asn Asp Phe Lys Asp Ile Glu Asp Ile Lys Lys Gln Lys Val Arg Ile
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 Glu Gly Ser Leu Trp Trp Thr Tyr Thr Ser Ser Ile Phe Phe Arg Ile
 130 135 140
 Ile Phe Glu Ala Ala Phe Met Tyr Val Phe Tyr Phe Leu Tyr Asn Gly
 145 150 155 160
 Tyr His Leu Pro Trp Val Leu Lys Cys Gly Ile Asp Pro Cys Pro Asn
 165 170 175
 Leu Val Asp Cys Phe Ile Ser Arg Pro Thr Glu Lys Thr Val Phe Thr
 180 185 190
 Ile Phe Met Ile Ser Ala Ser Val Ile Cys Met Leu Leu Asn Val Ala
 195 200 205
 Glu Leu Cys Tyr Leu Leu Leu Lys Val Cys Phe Arg Arg Ser Lys Arg
 210 215 220
 Ala Gln Thr Gln Lys Asn His Pro Asn His Ala Leu Lys Glu Ser Lys
 225 230 235 240
 Gln Asn Glu Met Asn Glu Leu Ile Ser Asp Ser Gly Gln Asn Ala Ile
 245 250 255
 Thr Gly Ser Gln Ala Lys His Phe Lys Val Lys Cys Ser Cys Val Ile
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 275 280 285
 Ser Val Ala
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<210> 160
 <211> 3951
 <212> DNA
 <213> Homo sapien

<400> 160

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<210> 161

<211> 943

<212> PRT

<213> Homo sapien

<400> 161

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			20					25					30		

Val	Gln	Leu	Gln	Asp	Asn	Gly	Tyr	Asn	Gly	Leu	Leu	Ile	Ala	Ile	Asn
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65					70					75					80
Phe	Phe	Arg	Asn	Ile	Lys	Ile	Leu	Ile	Pro	Ala	Thr	Trp	Lys	Ala	Asn
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Phe	Leu	Leu	Asn	Asp	Asn	Leu	Thr	Ala	Gly	Tyr	Gly	Ser	Arg	Gly	Arg
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Val	Phe	Val	His	Glu	Trp	Ala	His	Leu	Arg	Trp	Gly	Val	Phe	Asp	Glu
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			260					265					270		
Arg	Ser	Ala	Trp	Asp	Val	Ile	Thr	Asp	Ser	Ala	Asp	Phe	His	His	Ser
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Val	Glu	Ala	Gly	Asp	Lys	Val	Val	Cys	Leu	Val	Leu	Asp	Val	Ser	Ser
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Lys	Met	Ala	Glu	Ala	Asp	Arg	Leu	Leu	Gln	Leu	Gln	Gln	Ala	Ala	Glu
				325					330					335	
Phe	Tyr	Leu	Met	Gln	Ile	Val	Glu	Ile	His	Thr	Phe	Val	Gly	Ile	Ala
			340				345						350		
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		355				360						365			
Ser	Asn	Asp	Asp	Arg	Lys	Leu	Leu	Val	Ser	Tyr	Leu	Pro	Thr	Thr	Val
	370					375					380				
Ser	Ala	Lys	Thr	Asp											

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 465 470 475 480
 Ser Arg Ile Ser Ser Gly Thr Gly Asp Ile Phe Gln Gln His Ile Gln
 485 490 495
 Leu Glu Ser Thr Gly Glu Asn Val Lys Pro His His Gln Leu Lys Asn
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 Thr Val Thr Val Asp Asn Thr Val Gly Asn Asp Thr Met Phe Leu Val
 515 520 525
 Thr Trp Gln Ala Ser Gly Pro Pro Glu Ile Ile Leu Phe Asp Pro Asp
 530 535 540
 Gly Arg Lys Tyr Tyr Thr Asn Asn Phe Ile Thr Asn Leu Thr Phe Arg
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 Thr Ala Ser Leu Trp Ile Pro Gly Thr Ala Lys Pro Gly His Trp Thr
 565 570 575
 Tyr Thr Leu Asn Asn Thr His His Ser Leu Gln Ala Leu Lys Val Thr
 580 585 590
 Val Thr Ser Arg Ala Ser Asn Ser Ala Val Pro Pro Ala Thr Val Glu
 595 600 605
 Ala Phe Val Glu Arg Asp Ser Leu His Phe Pro His Pro Val Met Ile
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 Tyr Ala Asn Val Lys Gln Gly Phe Tyr Pro Ile Leu Asn Ala Thr Val
 625 630 635 640
 Thr Ala Thr Val Glu Pro Glu Thr Gly Asp Pro Val Thr Leu Arg Leu
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 Leu Asp Asp Gly Ala Gly Ala Asp Val Ile Lys Asn Asp Gly Ile Tyr
 660 665 670
 Ser Arg Tyr Phe Phe Ser Phe Ala Ala Asn Gly Arg Tyr Ser Leu Lys
 675 680 685
 Val His Val Asn His Ser Pro Ser Ile Ser Thr Pro Ala His Ser Ile
 690 695 700
 Pro Gly Ser His Ala Met Tyr Val Pro Gly Tyr Thr Ala Asn Gly Asn
 705 710 715 720
 Ile Gln Met Asn Ala Pro Arg Lys Ser Val Gly Arg Asn Glu Glu Glu
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 Arg Lys Trp Gly Phe Ser Arg Val Ser Ser Gly Gly Ser Phe Ser Val
 740 745 750
 Leu Gly Val Pro Ala Gly Pro His Pro Asp Val Phe Pro Pro Cys Lys
 755 760 765
 Ile Ile Asp Leu Glu Ala Val Lys Val Glu Glu Glu Leu Thr Leu Ser
 770 775 780
 Trp Thr Ala Pro Gly Glu Asp Phe Asp Gln Gly Gln Ala Thr Ser Tyr
 785 790 795 800
 Glu Ile Arg Met Ser Lys Ser Leu Gln Asn Ile Gln Asp Asp Phe Asn
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 Asn Ala Ile Leu Val Asn Thr Ser Lys Arg Asn Pro Gln Gln Ala Gly
 820 825 830
 Ile Arg Glu Ile Phe Thr Phe Ser Pro Gln Ile Ser Thr Asn Gly Pro
 835 840 845
 Glu His Gln Pro Asn Gly Glu Thr His Glu Ser His Arg Ile Tyr Val
 850 855 860
 Ala Ile Arg Ala Met Asp Arg Asn Ser Leu Gln Ser Ala Val Ser Asn
 865 870 875 880
 Ile Ala Gln Ala Pro Leu Phe Ile Pro Pro Asn Ser Asp Pro Val Pro
 885 890 895

Ala Arg Asp Tyr Leu Ile Leu Lys Gly Val Leu Thr Ala Met Gly Leu
 900 905 910
 Ile Gly Ile Ile Cys Leu Ile Ile Val Val Thr His His Thr Leu Ser
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 Arg Lys Lys Arg Ala Asp Lys Lys Glu Asn Gly Thr Lys Leu Leu
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<210> 162
 <211> 498
 <212> DNA
 <213> Homo sapien

<400> 162

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<210> 163
 <211> 1128
 <212> DNA
 <213> Homo sapien

<400> 163

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 <212> DNA
 <213> Homo sapien

<400> 164

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ttatttcaga ggaagcgctt ctgatttggt tcttttttcc ctttttgctc tttctggctg      240
tgtggtttgg agaaagcaca gttggagtag ccggttgcta aataagtccc gagcgcgagc      300
ggagacgatg cagcggagac tgggttcagca gtggagcgtc gcggtgttcc tgctgagcta      360
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<210> 165

<211> 177

<212> PRT

<213> Homo sapien

<400> 165

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Arg Leu Lys Arg Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly
35     40     45
Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe Phe Leu His His Leu Ile
50     55     60
Ala Glu Ile His Thr Ala Glu Ile Arg Ala Thr Ser Glu Val Ser Pro
65     70     75     80
Asn Ser Lys Pro Ser Pro Asn Thr Lys Asn His Pro Val Arg Phe Gly
85     90     95
Ser Asp Asp Glu Gly Arg Tyr Leu Thr Gln Glu Thr Asn Lys Val Glu
100    105    110
Thr Tyr Lys Glu Gln Pro Leu Lys Thr Pro Gly Lys Lys Lys Lys Gly
115    120    125
Lys Pro Gly Lys Arg Lys Glu Gln Glu Lys Lys Lys Arg Arg Thr Arg
130    135    140
Ser Ala Trp Leu Asp Ser Gly Val Thr Gly Ser Gly Leu Glu Gly Asp
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His Leu Ser Asp Thr Ser Thr Thr Ser Leu Glu Leu Asp Ser Arg Arg
165    170    175
His

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<210> 166
 <211> 177
 <212> PRT
 <213> Homo sapien

<400> 166
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 Arg Leu Lys Arg Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly
 35 40 45
 Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe Phe Leu His His Leu Ile
 50 55 60
 Ala Glu Ile His Thr Ala Glu Ile Arg Ala Thr Ser Glu Val Ser Pro
 65 70 75 80
 Asn Ser Lys Pro Ser Pro Asn Thr Lys Asn His Pro Val Arg Phe Gly
 85 90 95
 Ser Asp Asp Glu Gly Arg Tyr Leu Thr Gln Glu Thr Asn Lys Val Glu
 100 105 110
 Thr Tyr Lys Glu Gln Pro Leu Lys Thr Pro Gly Lys Lys Lys Lys Gly
 115 120 125
 Lys Pro Gly Lys Arg Lys Glu Gln Glu Lys Lys Lys Arg Arg Thr Arg
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 Ser Ala Trp Leu Asp Ser Gly Val Thr Gly Ser Gly Leu Glu Gly Asp
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<210> 167
 <211> 3362
 <212> DNA
 <213> Homo sapien

<400> 167
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<210> 168

<211> 2784

<212> DNA

<213> Homo sapien

<400> 168

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<210> 169

<211> 592

<212> PRT

<213> Homo sapien

<400> 169

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			20					25					30		
Val	Gln	Leu	Gln	Asp	Asn	Gly	Tyr	Asn	Gly	Leu	Leu	Ile	Ala	Ile	Asn
			35				40						45		

Pro	Gln	Val	Pro	Glu	Asn	Gln	Asn	Leu	Ile	Ser	Asn	Ile	Lys	Glu	Met
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Phe	Phe	Arg	Asn	Ile	Lys	Ile	Leu	Ile	Pro	Ala	Thr	Trp	Lys	Ala	Asn
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Asn	Asn	Ser	Lys	Ile	Lys	Gln	Glu	Ser	Tyr	Glu	Lys	Ala	Asn	Val	Ile
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Val	Thr	Asp	Trp	Tyr	Gly	Ala	His	Gly	Asp	Asp	Pro	Tyr	Thr	Leu	Gln
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Tyr	Arg	Gly	Cys	Gly	Lys	Glu	Gly	Lys	Tyr	Ile	His	Phe	Thr	Pro	Asn
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Phe	Leu	Leu	Asn	Asp	Asn	Leu	Thr	Ala	Gly	Tyr	Gly	Ser	Arg	Gly	Arg
145					150					155					160
Val	Phe	Val	His	Glu	Trp	Ala	His	Leu	Arg	Trp	Gly	Val	Phe	Asp	Glu
				165					170					175	
Tyr	Asn	Asn	Asp	Lys	Pro	Phe	Tyr	Ile	Asn	Gly	Gln	Asn	Gln	Ile	Lys
			180					185					190		
Val	Thr	Arg	Cys	Ser	Ser	Asp	Ile	Thr	Gly	Ile	Phe	Val	Cys	Glu	Lys
		195					200					205			
Gly	Pro	Cys	Pro	Gln	Glu	Asn	Cys	Ile	Ile	Ser	Lys	Leu	Phe	Lys	Glu
	210					215					220				
Gly	Cys	Thr	Phe	Ile	Tyr	Asn	Ser	Thr	Gln	Asn	Ala	Thr	Ala	Ser	Ile
225					230					235					240
Met	Phe	Met	Gln	Ser	Leu	Ser	Ser	Val	Val	Glu	Phe	Cys	Asn	Ala	Ser
				245					250					255	
Thr	His	Asn	Gln	Glu	Ala	Pro	Asn	Leu	Gln	Asn	Gln	Met	Cys	Ser	Leu
			260					265					270		
Arg	Ser	Ala	Trp	Asp	Val	Ile	Thr	Asp	Ser	Ala	Asp	Phe	His	His	Ser
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Phe	Pro	Met	Asn	Gly	Thr	Glu	Leu	Pro	Pro	Pro	Pro	Thr	Phe	Ser	Leu
	290					295					300				
Val	Glu	Ala	Gly	Asp	Lys	Val	Val	Cys	Leu	Val	Leu	Asp	Val	Ser	Ser
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Lys	Met	Ala	Glu	Ala	Asp	Arg	Leu	Leu	Gln	Leu	Gln	Gln	Ala	Ala	Glu
				325					330					335	
Phe	Tyr	Leu	Met	Gln	Ile	Val	Glu	Ile	His	Thr	Phe	Val	Gly	Ile	Ala
			340					345					350		
Ser	Phe	Asp	Ser	Lys	Gly	Glu	Ile	Arg	Ala	Gln	Leu	His	Gln	Ile	Asn
		355					360					365			
Ser	Asn	Asp	Asp	Arg	Lys	Leu	Leu	Val	Ser	Tyr	Leu	Pro	Thr	Thr	Val
		370				375					380				
Ser	Ala	Lys	Thr	Asp	Ile	Ser	Ile	Cys	Ser	Gly	Leu	Lys	Lys	Gly	Phe
385					390					395					400
Glu	Val	Val	Glu	Lys	Leu	Asn	Gly	Lys	Ala	Tyr	Gly	Ser	Val	Met	Ile
				405					410					415	
Leu	Val	Thr	Ser	Gly	Asp	Asp	Lys	Leu	Leu	Gly	Asn	Cys	Leu	Pro	Thr
			420					425					430		
Val	Leu	Ser	Ser	Gly	Ser	Thr	Ile	His	Ser	Ile	Ala	Leu	Gly	Ser	Ser
		435					440					445			
Ala	Ala	Pro	Asn	Leu	Glu	Glu	Leu	Ser	Arg	Leu	Thr	Gly	Gly	Leu	Lys
	450					455					460				
Phe	Phe	Val	Pro	Asp	Ile	Ser	Asn	Ser	Asn	Ser	Met	Ile	Asp	Ala	Phe
465					470					475					480

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Ser	Arg	Ile	Ser	Ser	Gly	Thr	Gly	Asp	Ile	Phe	Gln	Gln	His	Ile	Gln
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Leu	Glu	Ser	Thr	Gly	Glu	Asn	Val	Lys	Pro	His	His	Gln	Leu	Lys	Asn
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		515					520					525			
Thr	Trp	Gln	Ala	Ser	Gly	Pro	Pro	Glu	Ile	Ile	Leu	Phe	Asp	Pro	Asp
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Gly	Arg	Lys	Tyr	Tyr	Thr	Asn	Asn	Phe	Ile	Thr	Asn	Leu	Thr	Phe	Arg
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Thr	Ala	Ser	Leu	Trp	Ile	Pro	Gly	Thr	Ala	Lys	Pro	Gly	His	Trp	Thr
			565						570					575	
Tyr	Thr	Leu	Met	Cys	Phe	His	His	Ala	Lys	Leu	Leu	Thr	Trp	Lys	Leu
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<211> 791

<212> PRT

<213> Homo sapien

<400> 170

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Val	Gln	Leu	Gln	Asp	Asn	Gly	Tyr	Asn	Gly	Leu	Leu	Ile	Ala	Ile	Asn
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Pro	Gln	Val	Pro	Glu	Asn	Gln	Asn	Leu	Ile	Ser	Asn	Ile	Lys	Glu	Met
		50				55					60				
Ile	Thr	Glu	Ala	Ser	Phe	Tyr	Leu	Phe	Asn	Ala	Thr	Lys	Arg	Arg	Val
65					70					75					80
Phe	Phe	Arg	Asn	Ile	Lys	Ile	Leu	Ile	Pro	Ala	Thr	Trp	Lys	Ala	Asn
			85						90					95	
Asn	Asn	Ser	Lys	Ile	Lys	Gln	Glu	Ser	Tyr	Glu	Lys	Ala	Asn	Val	Ile
			100					105					110		
Val	Thr	Asp	Trp	Tyr	Gly	Ala	His	Gly	Asp	Asp	Pro	Tyr	Thr	Leu	Gln
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Tyr	Arg	Gly	Cys	Gly	Lys	Glu	Gly	Lys	Tyr	Ile	His	Phe	Thr	Pro	Asn
	130					135					140				
Phe	Leu	Leu	Asn	Asp	Asn	Leu	Thr	Ala	Gly	Tyr	Gly	Ser	Arg	Gly	Arg
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Val	Phe	Val	His	Glu	Trp	Ala	His	Leu	Arg	Trp	Gly	Val	Phe	Asp	Glu
				165					170					175	
Tyr	Asn	Asn	Asp	Lys	Pro	Phe	Tyr	Ile	Asn	Gly	Gln	Asn	Gln	Ile	Lys
			180					185					190		
Val	Thr	Arg	Cys	Ser	Ser	Asp	Ile	Thr	Gly	Ile	Phe	Val	Cys	Glu	Lys
		195					200					205			
Gly	Pro	Cys	Pro	Gln	Glu	Asn	Cys	Ile	Ile	Ser	Lys	Leu	Phe	Lys	Glu
	210					215					220				
Gly	Cys	Thr	Phe	Ile	Tyr	Asn	Ser	Thr	Gln	Asn	Ala	Thr	Ala	Ser	Ile
225					230					235					240
Met	Phe	Met	Gln	Ser	Leu	Ser	Ser	Val	Val	Glu	Phe	Cys	Asn	Ala	Ser
				245					250					255	
Thr	His	Asn	Gln	Glu	Ala	Pro	Asn	Leu	Gln	Asn	Gln	Met	Cys	Ser	Leu

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 305 310 315 320
 Lys Met Ala Glu Ala Asp Arg Leu Leu Gln Leu Gln Gln Ala Ala Glu
 325 330 335
 Phe Tyr Leu Met Gln Ile Val Glu Ile His Thr Phe Val Gly Ile Ala
 340 345 350
 Ser Phe Asp Ser Lys Gly Glu Ile Arg Ala Gln Leu His Gln Ile Asn
 355 360 365
 Ser Asn Asp Asp Arg Lys Leu Leu Val Ser Tyr Leu Pro Thr Thr Val
 370 375 380
 Ser Ala Lys Thr Asp Ile Ser Ile Cys Ser Gly Leu Lys Lys Gly Phe
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 405 410 415
 Leu Val Thr Ser Gly Asp Asp Lys Leu Leu Gly Asn Cys Leu Pro Thr
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 Val Leu Ser Ser Gly Ser Thr Ile His Ser Ile Ala Leu Gly Ser Ser
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 450 455 460
 Phe Phe Val Pro Asp Ile Ser Asn Ser Asn Ser Met Ile Asp Ala Phe
 465 470 475 480
 Ser Arg Ile Ser Ser Gly Thr Gly Asp Ile Phe Gln Gln His Ile Gln
 485 490 495
 Leu Glu Ser Thr Gly Glu Asn Val Lys Pro His His Gln Leu Lys Asn
 500 505 510
 Thr Val Thr Val Asp Asn Thr Val Gly Asn Asp Thr Met Phe Leu Val
 515 520 525
 Thr Trp Gln Ala Ser Gly Pro Pro Glu Ile Ile Leu Phe Asp Pro Asp
 530 535 540
 Gly Arg Lys Tyr Tyr Thr Asn Asn Phe Ile Thr Asn Leu Thr Phe Arg
 545 550 555 560
 Thr Ala Ser Leu Trp Ile Pro Gly Thr Ala Lys Pro Gly His Trp Thr
 565 570 575
 Tyr Thr Leu Asn Asn Thr His His Ser Leu Gln Ala Leu Lys Val Thr
 580 585 590
 Val Thr Ser Arg Ala Ser Asn Ser Ala Val Pro Pro Ala Thr Val Glu
 595 600 605
 Ala Phe Val Glu Arg Asp Ser Leu His Phe Pro His Pro Val Met Ile
 610 615 620
 Tyr Ala Asn Val Lys Gln Gly Phe Tyr Pro Ile Leu Asn Ala Thr Val
 625 630 635 640
 Thr Ala Thr Val Glu Pro Glu Thr Gly Asp Pro Val Thr Leu Arg Leu
 645 650 655
 Leu Asp Asp Gly Ala Gly Ala Asp Val Ile Lys Asn Asp Gly Ile Tyr
 660 665 670
 Ser Arg Tyr Phe Phe Ser Phe Ala Ala Asn Gly Arg Tyr Ser Leu Lys
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 Pro Gly Ser His Ala Met Tyr Val Pro Gly Tyr Thr Ala Asn Gly Asn
 705 710 715 720
 Ile Gln Met Asn Ala Pro Arg Lys Ser Val Gly Arg Asn Glu Glu Glu
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 Arg Lys Trp Gly Phe Ser Arg Val Ser Ser Gly Gly Ser Phe Ser Val
 740 745 750
 Leu Gly Val Pro Ala Gly Pro His Pro Asp Val Phe Pro Pro Cys Lys
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 <212> DNA
 <213> Homo sapien

<400> 171

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tgagaagggt	tctctcat	ctagaaagaa	gcgcttaaga	tgtggcagcc	cctcttcttc	180
aagtggctct	tgctctgtt	ccctgggagt	tctcaaattg	ctgcagcagc	ctccaccag	240
cctgaggatg	acatcaatac	acagaggaag	aagagtcagg	aaaagatgag	agaagttaca	300
gactctcctg	ggcgacccc	agagcttacc	attcctcaga	cttcttcaca	tggtgctaac	360
agatttggtc	ctaaaagtaa	agctctagag	gccgtcaa	tggcaataga	agccgggttc	420
caccatattg	attctgcaca	tgtttacaat	aatgaggagc	aggttggact	ggccatccga	480
agcaagattg	agagtgccag	tgtgaagaga	gaagacatat	tctacacttc	aaagctttgg	540
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gaagtgatcc	caaaagatga	aaatggaaaa	atactatttg	acacagtgga	tctctgtgcc	720
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aacttcaacc	acaggtgct	ggagatgatc	ctcaacaagc	cagggtcaa	gtacaagcct	840
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aagtcaaaag	acattgttct	ggttgccat	agtgtctctg	gatcccatcg	agaagaacca	960
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gtcctggcca	agagctacaa	tgagcagcgc	atcagacaga	acgtgcaggt	gtttgaattc	1140
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<210> 172
 <211> 364
 <212> PRT
 <213> Homo sapien

<400> 172

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 Asn Thr Gln Arg Lys Lys Ser Gln Glu Lys Met Arg Glu Val Thr Asp
 35 40 45
 Ser Pro Gly Arg Pro Arg Glu Leu Thr Ile Pro Gln Thr Ser Ser His
 50 55 60
 Gly Ala Asn Arg Phe Val Pro Lys Ser Lys Ala Leu Glu Ala Val Lys
 65 70 75 80
 Leu Ala Ile Glu Ala Gly Phe His His Ile Asp Ser Ala His Val Tyr
 85 90 95
 Asn Asn Glu Glu Gln Val Gly Leu Ala Ile Arg Ser Lys Ile Ala Asp
 100 105 110
 Gly Ser Val Lys Arg Glu Asp Ile Phe Tyr Thr Ser Lys Leu Trp Ser
 115 120 125
 Asn Ser His Arg Pro Glu Leu Val Arg Pro Ala Leu Glu Arg Ser Leu
 130 135 140
 Lys Asn Leu Gln Leu Asp Tyr Val Asp Leu Tyr Leu Ile His Phe Pro
 145 150 155 160
 Val Ser Val Lys Pro Gly Glu Glu Val Ile Pro Lys Asp Glu Asn Gly
 165 170 175
 Lys Ile Leu Phe Asp Thr Val Asp Leu Cys Ala Thr Trp Glu Ala Met
 180 185 190
 Glu Lys Cys Lys Asp Ala Gly Leu Ala Lys Ser Ile Gly Val Ser Asn
 195 200 205
 Phe Asn His Arg Leu Leu Glu Met Ile Leu Asn Lys Pro Gly Leu Lys
 210 215 220
 Tyr Lys Pro Val Cys Asn Gln Val Glu Cys His Pro Tyr Phe Asn Gln
 225 230 235 240
 Arg Lys Leu Leu Asp Phe Cys Lys Ser Lys Asp Ile Val Leu Val Ala
 245 250 255
 Tyr Ser Ala Leu Gly Ser His Arg Glu Glu Pro Trp Val Asp Pro Asn
 260 265 270
 Ser Pro Val Leu Leu Glu Asp Pro Val Leu Cys Ala Leu Ala Lys Lys
 275 280 285
 His Lys Arg Thr Pro Ala Leu Ile Ala Leu Arg Tyr Gln Leu Gln Arg
 290 295 300
 Gly Val Val Val Leu Ala Lys Ser Tyr Asn Glu Gln Arg Ile Arg Gln
 305 310 315 320
 Asn Val Gln Val Phe Glu Phe Gln Leu Thr Ser Glu Glu Met Lys Ala
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 Ile Asp Gly Leu Asn Arg Asn Val Arg Tyr Leu Thr Leu Asp Ile Phe
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<212> DNA

<213> Homo sapiens

<400> 173

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35 40 45
Cys Gly Leu Ala Cys Glu Arg Cys Arg Trp Ile Leu Pro Leu Leu Leu
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Leu Ser Ala Ile Ala Phe Asp Ile Ile Ala Leu Ala Gly Arg Gly Trp
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<222> (3549)
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 <222> (4088)
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 <221> unsure
 <222> (4115)
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<400> 175
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 ttactgtgtt tgtgtathtt aaaggcgaga agacgagggg aacaaaacca gctggatcca 180
 tccatcacgc tgggtgggtt taatttttctg ttttttctcg ttattttttt ttaaacaacc 240
 actcttcaca atgaacaaac tgtatatcgg aaacctcagc gagaacgccg cccctcggga 300
 cctagaaagt atcttcaagg acgccaagat cccggtgtcg ggacccttcc tgggtgaagac 360
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<210> 176

<211> 579

<212> PRT

<213> Homo sapiens

<400> 176

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Asp Leu Glu Ser Ile Phe Lys Asp Ala Lys Ile Pro Val Ser Gly Pro
20 25 30

Phe Leu Val Lys Thr Gly Tyr Ala Phe Val Asp Cys Pro Asp Glu Ser
35 40 45

Trp Ala Leu Lys Ala Ile Glu Ala Leu Ser Gly Lys Ile Glu Leu His
50 55 60

Gly Lys Pro Ile Glu Val Glu His Ser Val Pro Lys Arg Gln Arg Ile
65 70 75 80

Arg Lys Leu Gln Ile Arg Asn Ile Pro Pro His Leu Gln Trp Glu Val
85 90 95

Leu Asp Ser Leu Leu Val Gln Tyr Gly Val Val Glu Ser Cys Glu Gln
100 105 110

Val Asn Thr Asp Ser Glu Thr Ala Val Val Asn Val Thr Tyr Ser Ser
115 120 125

Lys Asp Gln Ala Arg Gln Ala Leu Asp Lys Leu Asn Gly Phe Gln Leu
130 135 140

Glu Asn Phe Thr Leu Lys Val Ala Tyr Ile Pro Asp Glu Met Ala Ala
145 150 155 160

Gln Gln Asn Pro Leu Gln Gln Pro Arg Gly Arg Arg Gly Leu Gly Gln
165 170 175

Arg Gly Ser Ser Arg Gln Gly Ser Pro Gly Ser Val Ser Lys Gln Lys
180 185 190

Pro Cys Asp Leu Pro Leu Arg Leu Leu Val Pro Thr Gln Phe Val Gly
195 200 205

Ala Ile Ile Gly Lys Glu Gly Ala Thr Ile Arg Asn Ile Thr Lys Gln
210 215 220

Thr Gln Ser Lys Ile Asp Val His Arg Lys Glu Asn Ala Gly Ala Ala
225 230 235 240

Glu Lys Ser Ile Thr Ile Leu Ser Thr Pro Glu Gly Thr Ser Ala Ala
245 250 255

Cys Lys Ser Ile Leu Glu Ile Met His Lys Glu Ala Gln Asp Ile Lys
260 265 270

Phe Thr Glu Glu Ile Pro Leu Lys Ile Leu Ala His Asn Asn Phe Val
275 280 285

Gly Arg Leu Ile Gly Lys Glu Gly Arg Asn Leu Lys Lys Ile Glu Gln
290 295 300

Asp Thr Asp Thr Lys Ile Thr Ile Ser Pro Leu Gln Glu Leu Thr Leu
305 310 315 320

Tyr Asn Pro Glu Arg Thr Ile Thr Val Lys Gly Asn Val Glu Thr Cys
325 330 335

Ala Lys Ala Glu Glu Glu Ile Met Lys Lys Ile Arg Glu Ser Tyr Glu
340 345 350

Asn Asp Ile Ala Ser Met Asn Leu Gln Ala His Leu Ile Pro Gly Leu
355 360 365

Asn Leu Asn Ala Leu Gly Leu Phe Pro Pro Thr Ser Gly Met Pro Pro
370 375 380

Pro Thr Ser Gly Pro Pro Ser Ala Met Thr Pro Pro Tyr Pro Gln Phe
385 390 395 400

Glu Gln Ser Glu Thr Glu Thr Val His Gln Phe Ile Pro Ala Leu Ser
405 410 415

Val Gly Ala Ile Ile Gly Lys Gln Gly Gln His Ile Lys Gln Leu Ser
420 425 430

Arg Phe Ala Gly Ala Ser Ile Lys Ile Ala Pro Ala Glu Ala Pro Asp
435 440 445

Ala Lys Val Arg Met Val Ile Ile Thr Gly Pro Pro Glu Ala Gln Phe
450 455 460

Lys Ala Gln Gly Arg Ile Tyr Gly Lys Ile Lys Glu Glu Asn Phe Val
465 470 475 480

Ser Pro Lys Glu Glu Val Lys Leu Glu Ala His Ile Arg Val Pro Ser
485 490 495

Phe Ala Ala Gly Arg Val Ile Gly Lys Gly Gly Lys Thr Val Asn Glu
500 505 510

Leu Gln Asn Leu Ser Ser Ala Glu Val Val Val Pro Arg Asp Gln Thr
515 520 525

Pro Asp Glu Asn Asp Gln Val Val Val Lys Ile Thr Gly His Phe Tyr
530 535 540

Ala Cys Gln Val Ala Gln Arg Lys Ile Gln Glu Ile Leu Thr Gln Val
545 550 555 560

Lys Gln His Gln Gln Gln Lys Ala Leu Gln Ser Gly Pro Pro Gln Ser
 565 570 575

Arg Arg Lys

<210> 177
 <211> 401
 <212> DNA
 <213> Homo sapiens

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 agatccaaac aaatacacat tctgtgtttt agctcagtgt tttctaaaaa aagaaactgc 120
 cacacagcaa aaaattgttt actttgttgg acaaaccaaa tcagtcttca aaaaatgacc 180
 ggtgcttata aaaagttata aatatcgagt agctctaaaa caaacacact gaccaagagg 240
 gaagtgaagt tgtgcttagt atttacattg gatgccagtt ttgtaatcac tgacttatgt 300
 gcaaaactgg gcagaaattc tataaactct ttgctgtttt tgatacctgc tttttgtttc 360
 attttgtttt gttttgtaaa aatgataaaa cttcagaaaa t 401

<210> 178
 <211> 561
 <212> DNA
 <213> Homo sapiens

<400> 178
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 gcccgtatg ggacaggggt ctttggccag aatgagtacc tacgctatca ggaggccctg 120
 agtgagctgg cactgcggt taaagcacga attgggagct ctcagcgaca tcaccagtca 180
 gcagccaaag acctaaacta gtcccctgag gtctcccca caaccatcca ggtgacatac 240
 ctcccctcca gtcagaagag taaacgtgcc aagcacttcc ttgaattgaa gagctttaag 300
 gataactata acacattgga gagtactctg tgacggagct gaaggactct tgccgtagat 360
 taagccagtc agttgcaatg tgcaagacag gctgcttgcc gggccgcct cggaacatct 420
 ggcccagcag gccagactg tatccatcca agttcccgtt gtatccagag ttcttagagc 480
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 gactattttc cccagtagc g 561

<210> 179
 <211> 521
 <212> DNA
 <213> Homo sapiens

<400> 179
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 gatcgagcaa tggcttcagg acatgggttc tcttctctg tgatcattca agtgcact 120
 gcatgaagac tggctgtct cagtgtttca acctcaccag ggctgtctct tgggccacac 180
 ctgcctccct gttagtgcg tatgacagcc cccatcaaat gaccttggcc aagtcacgg 240
 ttctctgtgg tcaaggttgg ttggctgatt ggtggaaagt aggggtggacc aaaggaggcc 300
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 tttctctctg ccttgggtgg gctagggcct gattcgggaa gatgcctttg caggagggg 420
 aggataagt ggatctacca attgattctg gcaaaacaat ttctaagatt tttttgctt 480
 atgtgggaaa cagatctaaa tctcatttta tgctgtattt t 521

<210> 180
 <211> 417
 <212> DNA
 <213> Homo sapiens

<400> 180
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 tcctgggccc cctggcgccg atcgtggcta aacagggtact gctgggcccg aaggtggtgg 120
 tcgtacgctg tgaaggcatc aacatttctg gcaatttcta cagaaacaag ttgaagtacc 180
 tggttttctt ccgcaagcgg atgaacacca acccttcccc aggcccctac cacttccggg 240
 cccccagccg catcttctgg cggaccgtgc gaggtatgct gcccacaaaa accaagcgag 300
 gccaggccgc tctggaccgt ctcaaggtgt ttgacggcat cccaccgccc tacgacaaga 360
 aaaagcggat ggtggttctt gctgccctca aggtcgtgcg tctgaagcct acaagaa 417

<210> 181
 <211> 283
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (35)
 <223> n=A,T,C or G

<400> 181
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 caagaactca agtgtaactg tgataaaata acctttccca ggtatattgg caggtatgtg 120
 tgtaatctca gaatacacag gtgacataga tatgatatga caactggtaa tgggtggattc 180
 atttacattg tttaacttct tatgaccagg ccttaaggga aggtcagttt tttaaaaaac 240
 caagtagtgt cttcctacct atctccagat acatgtcaaa aaa 283

<210> 182
 <211> 401
 <212> DNA
 <213> Homo sapiens

<400> 182
 atattcttgc tgcttatgca gctgacattg ttgccctccc taaagcaacc aagtagcctt 60
 tatttcccac agtgaaagaa aacgctggcc tatcagttac attacaaaag gcagatttca 120
 agaggattga gtaagtagtt ggatggcttt cataaaaaca agaattcaag aagaggattc 180
 atgctttaag aaacatttgt tatacatccc tcacaaatta tacctgggat aaaaactatg 240
 tagcaggcag tgtgttttcc ttccatgtct ctctgcacta cctgcagtgt gtcctctgag 300
 gctgcaagtc tgccttatct gaattcccag cagaagcact aagaagctcc accctatcac 360
 ctagcagata aaactatggg gaaaacttaa atctgtgcat a 401

<210> 183
 <211> 366
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (325)
 <223> n=A,T,C or G

CCCTTCTTCT AAATAGGATG TAAAACCTCT TTCAATTAC TCTTCCTCAG TCCTGCCTGC 60
 CAAGAACTCA AGTGTAAGTGTGATAAAATA ACCTTTCCCA GGTATATTGG CAGGTATGTG 120
 TGTAATCTCA GAATACACAG GTGACATAGA TATGATATGA CAACTGGTAA TGGTGGATTCT 180
 ATTTACATTG TTTAACCTCT TATGACCAGG CTTAAGGA AGGTCAGTTT TTTAAAAAAC 240
 CAAGTAGTGT CTTCTACCT ATCTCCAGAT ACATGTCAAA AAA 283

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<210> 184
<211> 370
<212> DNA
<213> Homo sapiens
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<210> 185
<211> 107
<212> DNA
<213> Homo sapiens
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<210> 186
<211> 309
<212> DNA
<213> Homo sapiens
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<210> 187
<211> 477
<212> DNA
<213> Homo sapiens
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<400> 187
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tccaacctcg ggccagtgtc ttcaggcttt actggggacc tgcgagctgg cctaattgtg 120


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tggcctgcaa gccaggccat ccttgggcgc cacagacgag ctccgagcca ggtcaggctt 180
cggaggccac aagctcagcc tcaggcccag gcactgattg tggcagaggg gccactaccc 240
aaggtctagc taggcccacg acctagttac ccagacagtg agaagcccct ggaaggcaga 300
aaagttggga gcatggcaga caggggaagg aaacattttc agggaaaaga catgtatcac 360
atgtcttcag aagcaagtca ggtttcatgt aaccgagtgt cctcttgctg gtccaaaagt 420
agcccagggc tgtagcacag gcttcacagt gattttgtgt tcagccgtga gtcacac 477

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<210> 188

<211> 220

<212> DNA

<213> Homo sapiens

<400> 188

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ttaaataagt accctgtgag tatgagataa attagtgaca atcagaacaa gtttcagtat 120
cagatgttca agaggaagtt gctattgcat tgattttaat atttgtacat aaacactgat 180
ttttttgagc attattttgt atttgttcta ctttaatacc 220

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<210> 189

<211> 417

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (76)

<223> n=A,T,C or G

<221> unsure

<222> (77)

<223> n=A,T,C or G

<400> 189

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tatcattatt ctagtccttt gaatttgtaa ggggaaaaaa aacaaaaaca aaaacttacg 180
atgcactttt ctccagcaca tcagatttca aattgaaaat taaagacatg ctatggtaat 240
gcacttgcta gtactacaca ctttgtacaa caaaaaacag aggcaagaaa caacgaaaag 300
agaaaagcct tcctttgttg gcccttaaac tgagtcaaga tctgaaatgt agagatgatc 360
tctgacgata cctgtatgtt cttattgtgt aaataaaaatt gctggtatga aatgaca 417

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<210> 190

<211> 497

<212> DNA

<213> Homo sapiens

<400> 190

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gcactgcggc gctctcccgt cccgcggtgg ttgctgctgc tgccgctgct gctgggcctg 60
aacgcaggag ctgtcattga ctggcccaca gaggagggca aggaagtatg ggattatgtg 120
acggtccgca aggatgccta catgttctgg tggctctatt atgccacaa ctcttgcaag 180
aacttctcag aactgcccct ggatcatgtg cttcagggcg gtccaggcgg ttctagcact 240
ggatttgga aatttgagga aattgggccc cttgacagtg atctcaaacc acggaaaacc 300
acctggctcc aggtgccag tctcctattt gtggataatc ccgtgggcac tgggttcagt 360
tatgtgaatg gtatgggtgc ctatgccaa gacctggcta tgggtggctc agacatgatg 420
gttctcctga agaccttctt cagttgccac aaagaattcc agacagttcc attctacatt 480

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ttctcagagt cctatgg

497

<210> 191

<211> 175

<212> DNA

<213> Homo sapiens

<400> 191

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ctacttgagt acaaggattt gagcctgtta cattcactgc tgaatttttag gctcctggaa 120
gatacccagc attcaataga gaccacacaa taaatatatg tcaaataaaa aaaaa 175

<210> 192

<211> 526

<212> DNA

<213> Homo sapiens

<400> 192

agtaaacatt attatTTTTT ttatatTTTgc aaaggaaaca tatctaattcc ttcctataga 60
aagaacagta ttgctgtaat tcctTTTctt ttcttctca tttcctctgc cccttaaaag 120
attgaagaaa gagaaacttg tcaactcata tccacgttat ctagcaaagt acataagaat 180
ctatcactaa gtaatgtatc cttcagaatg tgttggttta ccagtgcacac cccatattca 240
tcacaaaatt aaagcaagaa gtccatagta atttatTTTgc taatagtgga tttttaatgc 300
tcagagtttc tgagggtcaaa ttttatcttt tcacttacaa gctctatgat cttaaataat 360
ttacttaatg tattttggtg tattttcctc aaattaatat tgggtgttcaa gactatatct 420
aattcctctg atcactttga gaaacaaact tttattaaat gtaaggcact tttctatgaa 480
ttttaaatat aaaaataaat attgttctga ttattactga aaaaaa 526

<210> 193

<211> 553

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (290)

<223> n=A,T,C or G

<221> unsure

<222> (300)

<223> n=A,T,C or G

<221> unsure

<222> (411)

<223> n=A,T,C or G

<221> unsure

<222> (441)

<223> n=A,T,C or G

<400> 193

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cagtggtagc agttggactg accattgctg ctgcaggatt tgcaggccgt tacgttttgc 180
aagccatgaa gcatatggag cctcaagtaa aacaagtttt tcaaagccta ccaaaatctg 240
ccttcagtgg tggctattat agaggtgggt ttgaacccaa aatgacaaan cgggaagcan 300
cattaatact aggtgtaagc cctactgcc aataagagat gctcatcgac 360

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gaattatgct tttaaactcat cctgacaaag gaggatctcc ttatatagca nccaaaatca 420
atgaagctaa agatttacta naagggtcaag ctaaaaaatg aagtaaagt atgatgaatt 480
ttaagttcgt attagtttat gtatatgagt actaagtttt tataataaaa tgcctcagag 540
ctacaatttt aaa 553

```

```

<210> 194
<211> 320
<212> DNA
<213> Homo sapiens

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<400> 194
cccttcccaa tccatcagta aagaccccat ctgccttgct catgccgttt cccaacaggg 60
atgtcacttg atatgagaat ctcaaacttc aatgccttat aagcattcct tcctgtgtcc 120
attaagactc tgataattgt ctccccctca taggaatttc tcccaggaaa gaaatatatc 180
cccatctccg ttccatatca gaactaccgt ccccgatatt cccttcagag agattaaaga 240
ccagaaaaaa gtgagcctct tcactctgcac ctgtaatagt ttcagttcct attttcttcc 300
attgacccat atttatacct 320

```

```

<210> 195
<211> 320
<212> DNA
<213> Homo sapiens

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<220>
<221> unsure
<222> (203)
<223> n=A,T,C or G
<221> unsure
<222> (218)
<223> n=A,T,C or G

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<400> 195
aagcatgacc tggggaaatg gtcagacctt gtatttgttt tttggccttg aaagtagcaa 60
gtgaccagaa tctgccatgg caacaggctt taaaaaagac ccttaaaaag acactgtctc 120
aactgtggtg ttgacaccag ccagctctct gtacatttgc tagctttag ttttctaaga 180
ctgagtaaac ttcttatttt tanaaagggg aggtctgntt gtaactttcc ttgtacttaa 240
ttgggtaaaa gtcttttcca caaaccacca tctattttgt gaactttgtt agtcatcttt 300
tatttggtaa attatgaact 320

```

```

<210> 196
<211> 357
<212> DNA
<213> Homo sapiens

```

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<220>
<221> unsure
<222> (36)
<223> n=A,T,C or G

```

```

<400> 196
atataaaata atacgaaact ttaaaaagca ttggantgtc agtatgttga atcagtagtt 60
tcactttaac tgtaaacaat ttcttaggac accatttggg ctagtttctg tgtaagtga 120
aatactacaa aaacttattt atactgttct tatgtcattt gttatattca tagatttata 180
tgatgatatg acatctggct aaaaagaaat tattgcaaaa ctaaccacta tgtacttttt 240

```

tataaatact gtatggacaa aaaatggcat tttttatatt aaattgttta gctctggcaa 300
 aaaaaaaaaa ttttaagagc tgggtactaat aaaggattat tatgactgtt aaaaaaa 357

<210> 197
 <211> 565
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (27)
 <223> n=A,T,C or G

<400> 197
 tcagctgagt accatcagga tatttanccc ttttaagtgt gttttgggag tagaaaacta 60
 aagcaacaat acttcctctt gacagctttg attggaatgg gggtattaga tcattcacct 120
 tggtcctaca ctttttagga tgcttgggtga acataacacc acttataatg aacatccctg 180
 gttcctatat tttgggctat gtgggtagga attgttactt gttactgcag cagcagccct 240
 agaaagtaag cccagggtt cagatctaag ttagtccaaa agctaaatga tttaaagtca 300
 agttgtaatg ctaggcataa gcactctata atacattaaa ttataggccg agcaattagg 360
 gaatgtttct gaaacattaa acttgtatit atgtcactaa aattctaaca caaacttaaa 420
 aaatgtgtct catacatatg ctgtactagg cttcatcatg catttctaaa tttgtgtatg 480
 atttgaatat atgaaagaat ttataacaaga gtgttattta aaattattaa aaataaatgt 540
 atataatttg tacctattgt aaaaa 565

<210> 198
 <211> 484
 <212> DNA
 <213> Homo sapiens

<400> 198
 tatgtaagta ttgggtgtctg ctttaaaaaa ggagaccag acttcacctg tccttttttaa 60
 acatttgaga acagtgttac tctgagcagt tgggccacct tcaccttacc cgacagctga 120
 ctgttggatg tgtccattgt cgccagtttg gctgttgccc ggacaggaca ggacctccat 180
 tgggcgcagc agcagggtggc aggggtgttg cttgaggtgg gtggcagcgt ctggtcctcc 240
 tctctggtgc tttctgagag ggtctctaaa gcagagtgtg gttggcctgg gggaaggcag 300
 agcacgtatt tctccctct agtacctctg catttgtgag tgttccctct ggctttctga 360
 agggcagcag actcttgagt atactgcaga ggacatgctt tatcagtagg tcctgagggc 420
 tccagggggt caactgacca agtaacacag aagttggggt atgtggccta tttgggtcgg 480
 aaac 484

<210> 199
 <211> 429
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (77)
 <223> n=A,T,C or G
 <221> unsure
 <222> (88)
 <223> n=A,T,C or G
 <221> unsure

<222> (134)
 <223> n=A,T,C or G
 <221> unsure
 <222> (151)
 <223> n=A,T,C or G
 <221> unsure
 <222> (189)
 <223> n=A,T,C or G
 <221> unsure
 <222> (227)
 <223> n=A,T,C or G
 <221> unsure
 <222> (274)
 <223> n=A,T,C or G
 <221> unsure
 <222> (319)
 <223> n=A,T,C or G

<400> 199
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 tacagtacct ttctcanaca ttttgtanaa ttcatttcgg cagctcacta ggattttgct 120
 gaacattaaa aagngtgata gcgatattag ngccaatcaa atggaaaaaa ggtagtctta 180
 ataaacaana cacaacgttt ttatacaaca tacttttaaaa tattaanaaa actccttaat 240
 attgtttcct attaagtatt attctttggg caanattttc tgatgctttt gattttctct 300
 caatttagca tttgctttng gtttttttct ctatttagca ttctgttaag gcacaaaaac 360
 tatgtactgt atgggaaatg ttgtaaatat taccttttcc acatttttaa cagacaactt 420
 tgaatccaa 429

<210> 200
 <211> 279
 <212> DNA
 <213> Homo sapiens

<400> 200
 gcttttttga ggaattacag ggaagctcct ggaattgtac atggatatct ttatccctag 60
 ggggaaatca aggagctggg caccctaat tctttatgga agtggtttaa actattttta 120
 ttttattaca agtattacta gagtagtggt tctactctaa gatttcaaaa gtgcatttaa 180
 aatcatacat gttcccgct gcaaatatat tgttattttg gtggagaaaa aaatagtata 240
 ttctacataa aaaattaaag atattaacta agaaaaaaa 279

<210> 201
 <211> 569
 <212> DNA
 <213> Homo sapiens

<400> 201
 taggtcagta tttttagaaa ctcttaatat ctcatactct tgataccaaa agcagccctg 60
 attgttaaag cacacacctg cacaagaagc agtgatgggt gcattttacat ttcctgggtg 120
 cacaaaaaaa aattctcaaa aagcaaggac ttacgctttt tgcaaagcct ttgagaagtt 180
 actggatcat aggaagctta taacaagaat ggaagattct taaataactc actttctttg 240
 gtatccagta acagtagatg ttcaaaatat gtatgctgatt aataccagca ttgtgaacgc 300
 tgtacaacct tgtggttatt actaagcaag ttactactag cttctgaaaa gtagcttcat 360
 aattaatgtt atttatacac tgccttccat gaacttttact ttgccctaag ctaatctcca 420
 aaatctgaaa tgctactcca atatcagaaa aaaaggggga ggtggaatta tatttcctgt 480

```
<400> 204
agcatctttt ctacaacggt aaaattgcag aagtagctta tcattaaaaa acaacaacaa 60
caacaataac aataaatcct aagtgtaaat cagttattct accccctacc aaggatatca 120
gcctgttttt tccctttttt ctccctggga taattgtggg cttcttccca aatttctaca 180
gcctcttttc ttttctcatg cttgagcttc cctgtttgca cgcatgcgtg tgcaggactg 240
gcttggtgtg ttggactcgg ctccaggtgg aagcatgctt tcccttggtt ctggtggaga 300
aactcaaac ttcaagccct aggtgtagcc attttgtcaa gtcatcaact gtatttttgt 360
actggcatta acaaaaaaag aagataaaat attgtaccat taaactttaa taaaacttta 420
a
421
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<210> 205
 <211> 460
 <212> DNA
 <213> Homo sapiens

<400> 205
 tactctcaca atgaaggacc tggaatgaaa aatctgtgtc taaacaagtc ctcttttagat 60
 tttagtgcaa atccagagcc agcgtcgggt gcctcgagta attctttcat gggtagcttt 120
 ggaaaagctc tcaggagacc tcacctagat gcctattcaa gctttggaca gccatcagat 180
 tgtcagccaa gaggctttta tttgaaagct cattcttccc cagacttgga ctctgggtca 240
 gaggaagatg ggaaagaaa gacagatttt caggaagaaa atcacatttg tacctttaaa 300
 cagactttag aaaactacag gactccaaat tttcagtctt atgacttgga cacatagact 360
 gaatgagacc aaaggaaaag cttaacatac tacctcaagg tgaactttta tttaaaagag 420
 agagaatctt atgtttttta aatggagtta tgaattttta 460

<210> 206
 <211> 481
 <212> DNA
 <213> Homo sapiens

<400> 206
 tgtggtggaa ttcgggacgc cccagaccc tgactttttc ctgctggtggc cgtctcctcc 60
 tgcggaagca gtgacctctg acccctgggt accttgcctt tgagtgcctt ttgaacgctg 120
 gtcccgcggt acttggtttt ctcaagctct gtctgtccaa agacgctccg gtcgagggtc 180
 cgctgcctt ggggtggatac ttgaacccca gacgcccctc tgtgtctgtg tgtccggagg 240
 cggccttccc atctgacctg ccacccggag ctctttccgc cggcgagagg tcccaagccc 300
 acctcccgcc ctgagtcctg cgggtgtcgt ctgggcacgt cctgcacaca caatgcaagt 360
 cctggcctcc gcgcccgcgc gccacgcga gcgtaccgc cgcgcaactc tgttatttat 420
 ggtgtgacct cctggagggt ccctcgcccc accggggcta tttattgttt aatttatttg 480
 t 481

<210> 207
 <211> 605
 <212> DNA
 <213> Homo sapiens

<400> 207
 accctttttg gattcagggc tcctcacaat taaaatgagt gtaatgaaac aaggtagaaa 60
 tatagaagca tccctttgta tactgttttg ctacttacag tgtacttggc attgctttat 120
 ctactggat tctcacggta ggatttctga gatcttaatc taagctccaa agttgtctac 180
 ttttttgatc ctagggtgct ctttttggtt tacagagcag ggtcacttga tttgctagct 240
 ggtggcagaa ttggcaccat taccaggtc tgactgacca ccagtcagag gcactttatt 300
 tgtatcatga aatgatttga aatcattgta aagcagcgaa gtctgataat gaatgccagc 360
 tttccttggt ctttgataac aaagactcca aatattctgg agaacctgga taaaagtttg 420
 aagggtctga ttgggatttg aagacaaaat tgtaggaaat cttacatttt tgcaataaca 480
 aacattaatg aaagcaaaac attataaaaag taattttta tccacacata cttatcaatt 540
 tcttgatgct tccaaatgac atctaccaga tatgggtttg tggacatctt tttctgttta 600
 cataa 605

<210> 208
 <211> 655
 <212> DNA
 <213> Homo sapiens

<400> 208

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ggcgttggtc tggattcccg tcgtaactta aagggaact ttcacaatgt ccggagccct 60
tgatgtcctg caaatgaagg aggaggatgt ccttaagttc cttgcagcag gaaccactt 120
aggtggcacc aatcttgact tccagatgga acagtacatc tataaaagga aaagtgatgg 180
catctatata ataaatctca agaggacctg ggagaagctt ctgctggcag ctgctgcaat 240
tggtgccatt gaaaaccctg ctgatgtcag tggtatatcc tccaggaata ctggccagag 300
ggctgtgctg aagtttgctg ctgccactgg agccactcca attgctggcc gcttcaactcc 360
tggaaccttc actaaccaga tccaggcagc cttccgggag ccacggcttc ttgtgggttac 420
tgaccccgagg gctgaccacc agcctctcac ggaggcatct tatgttaacc tactaccat 480
tgcgctgtgt aacacagatt ctctctgcg ctatgtggac attgccatcc catgcaacaa 540
caagggagct cactcagtgg gtttgatgtg gtggatgctg gctcgggaag ttctgcgcat 600
gcgtggcacc atttcccgtg aacacccatg ggaggtcatg cctgatctgt acttc 655

```

<210> 209

<211> 621

<212> DNA

<213> Homo sapiens

<400> 209

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catttagaac atggttatca tccaagacta ctctaccctg caacattgaa ctccaagag 60
caaatccaca ttctcttga gttctgcagc ttctgtgtaa atagggcagc tgcgtctat 120
gccgtagaat cacatgatct gaggaccatt catggaagct gctaaatagc ctagtctggg 180
gagcttcca taaagttttg catggagcaa acaaacagga ttaaactagg ttgggtcct 240
tcagccctct aaaagcatag ggcttagcct gcaggcttcc ttgggcttcc tctgtgtgtg 300
tagttttgta aacactatag catctgttaa gatccagtgt ccatggaaac cttccacat 360
gccgtgactc tggactatat cagtttttgg aaagcagggt tcctctgcct gctaacaagc 420
ccacgtggac cagtctgaat gtctttcctt tacacctatg tttttaata gtcaaacctc 480
aagaaacaat ctaaacaagt ttctgttgca tatgtgtttg tgaacttgta ttgtattta 540
gtaggcttct atattgcatt taacttgtt ttgtaactcc tgattcttcc ttttcggata 600
ctattgatga ataaagaaat t

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621

<210> 210

<211> 533

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (20)

<223> n=A,T,C or G

<221> unsure

<222> (21)

<223> n=A,T,C or G

<221> unsure

<222> (61)

<223> n=A,T,C or G

<400> 210

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cgcccttgggg agccggcggn ngagtccggg acgtggagac ccgggggtccc ggcagccggg 60
nggccccgagg gccagggtg gggatgcacc gccgcggggg gggagctggc gccatcgcca 120
agaagaaact tgacagaggc aagtataagg agcaggggac ggtcttggct gaggaccagc 180
tagcccagat gtcaaagcag ttggacatgt tcaagaccaa cctggaggaa tttgccagca 240
aacacaagca ggagatccgg aagaatcctg agttccgtgt gcagttccag gacatgtgtg 300
caaccattgg cgtggatccg ctggcctctg gaaaaggatt ttggtctgag atgctgggag 360

```


tgggggactt ctattacgaa ctaggtgtcc aaattatcga agtgtgcctg gcgctgaagc 420
 atcggaatgg aggtctgata actttggagg aactacatca acaggtgttg aagggaagg 480
 gcaagttcgc ccaggatgtc agtcaagatg acctgatcag agccatcaag aaa 533

<210> 211

<211> 451

<212> DNA

<213> Homo sapiens

<400> 211

ttagcttgag ccgagaacga ggcgagaaag ctggagaccg aggagaccgc ctagagcgga 60
 gtgaacgggg aggggaccgt ggggaccggc ttgatcgtgc gcggacacct gctaccaagc 120
 ggagcttcag caaggaagtg gaggagcgga gtagagaacg gccctcccag cctgaggggc 180
 tgcgcaaggc agctagcctc acggaggatc gggaccgtgg gcgggatgcc gtgaagcgag 240
 aagctgccct acccccagtg agccccctga aggcggctct ctctgaggag gagttagaga 300
 agaaatccaa ggctatcatt gaggaatata tccatctcaa tgacatgaaa gaggcagtcc 360
 agtgcgtgca ggagctggcc tcacctcct tgctcttcat ctttgtacgg catgggtgctg 420
 agtctacgct ggagcgcagt gccattgtct g 451

<210> 212

<211> 471

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (54)

<223> n=A,T,C or G

<400> 212

gtgattattc ttgatcaggg agaagatcat ttagatttgt tttgcattcc ttanaatgga 60
 gggcaacatt ccacagctgc cctggctgtg atgagtgtcc ttgcaggggc cggagtagga 120
 gcaactgggt gggggcgga ttggggttac tcgatgtaag ggattccttg ttgttgtgtt 180
 gagatccagt gcagttgtga tttctgtgga tcccagcttg gttccaggaa ttttgtgtga 240
 ttggcttaaa tccagttttc aatcttcgac agctgggctg gaacgtgaac tcagtagctg 300
 aacctgtctg acccgtcac gttcttggat cctcagaact ctttgcctt gtcgggggtg 360
 ggggtgggaac tcacgtgggg agcgggtggt gagaaaatgt aaggattctg gaatacatat 420
 tccatgggac tttccttccc tctcctgctt cctcttttcc tgctccctaa c 471

<210> 213

<211> 511

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (27)

<223> n=A,T,C or G

<221> unsure

<222> (63)

<223> n=A,T,C or G

<221> unsure

<222> (337)

<223> n=A,T,C or G

<221> unsure
 <222> (442)
 <223> n=A,T,C or G

<400> 213
 ctaattagaa acttgctgta ctttttnttt tcttttaggg gtcaaggacc ctctttatag 60
 ctncatttg cctacaataa attattgcag cagtttgcaa tactaaaata ttttttatag 120
 actttatatt tttccttttg ataaagggat gctgcatagt agagttgggtg taattaaact 180
 atctcagccg tttccctgct ttcccttctg ctccatatgc ctcatgtcc ttccagggag 240
 ctcttttaat cttaaagtcc tacatttcat gctcttagtc aaattctgtt acctttttta 300
 taactcttcc cactgcatat ttccatcttg aattggnggt tctaaattct gaaactgtag 360
 ttgagataca gctattttaa atttctggga gatgtgcac cctcttcttt gtgggtgccc 420
 aagggtgttt tgcgtaactg anactccttg atatgcttca gagaatttag gcaaactg 480
 gccatggccg tgggagtact gggagtaaaa t 511

<210> 214
 <211> 521
 <212> DNA
 <213> Homo sapiens

<400> 214
 agcattgcc aataatccct aattttccac taaaaatata atgaaatgat gttaagcttt 60
 ttgaaaagtt taggttaaac ctactgttgt tagattaatg tatttggtgc ttccctttat 120
 ctggaatgtg gcattagctt ttttatttta accctcttta attcttattc aattccatga 180
 cttaagggtg gagagctaaa cactgggatt tttggataac agactgacag ttttgcataa 240
 ttataatcgg cattgtacat agaaaggata tggctacctt ttgttaaatc tgcactttct 300
 aaatatcaaa aaagggaat gaagtataaa tcaatttttg tataatctgt ttgaaacatg 360
 agttttattt gcttaatat agggctttgc cccttttctg taagtctctt gggatcctgt 420
 gtagaagctg ttctcattaa acaccaaaca gttaagtcca ttctctggta ctagctacaa 480
 attcggtttc atattctact taacaattta aataaactga a 521

<210> 215
 <211> 381
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (17)
 <223> n=A,T,C or G
 <221> unsure
 <222> (20)
 <223> n=A,T,C or G
 <221> unsure
 <222> (60)
 <223> n=A,T,C or G
 <221> unsure
 <222> (61)
 <223> n=A,T,C or G
 <221> unsure
 <222> (365)
 <223> n=A,T,C or G

<400> 215

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gagcggagag cggaccngtn agagccctga gcagcccccac cgccgccgcc ggcctagttn 60
ncatcacacc ccgggaggag ccgcagctgc cgcagccggc cccagtcacc atcacgcaa 120
ccatgagcag cgaggccgag acccagcagc cgcccgcgcg ccccccgcc gcccccgccc 180
tcagcgccgc cgacaccaag cccggcacta cgggcagcgg cgcagggagc ggtggcccg 240
gcggcctcac atcggcgggc cctgccggcg gggacaagaa ggtcatcgca acgaaggttt 300
tggaacagt aaaatggttc aatgtaagga acggatatgg tttcatcaac aggaatgaca 360
ccaangaaga tgtatttga c                                     381

```

<210> 216

<211> 425

<212> DNA

<213> Homo sapiens

<400> 216

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ttactaacta ggtcattcaa ggaagtcaag ttaacttaaa catgtcacct aaatgcactt 60
gatggtgttg aaatgtccac cttcttaaat ttttaagatg aacttagttc taaagaagat 120
aacaggccaa tcctgaaggt actccctgtt tgctgcagaa tgtcagatat tttggatgtt 180
gcataagagt cctatttgcc ccagttaatt caacttttgt ctgcctgttt tgtggactgg 240
ctggctctgt tagaactctg tccaaaaagt gcatggaata taacttgtaa agcttccac 300
aattgacaat atatatgcat gtgttttaac caaatccaga aagcttaaac aatagagctg 360
cataatagta tttattaaag aatcacaact gtaaacatga gaataactta aggattctag 420
tttag                                             425

```

<210> 217

<211> 181

<212> DNA

<213> Homo sapiens

<400> 217

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gagaaaccaa atgatagggt gtagagcctg atgactccaa acaaagccat cccccgcatt 60
cttcctcctt cttctggtgc tacagctcca agggcccttc accttcattg ctgaaatgga 120
actttggctt tttcagtgga agaatatgtt gaaggtttca ttttgttcta gaaaaaaaaa 180
a                                             181

```

<210> 218

<211> 405

<212> DNA

<213> Homo sapiens

<400> 218

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caggccttcc agttcactga caaacatggg gaagtgtgcc cagctggctg gaaacctggc 60
agtgatacca tcaagcctga tgtccaaaag agcaaagaat atttctccaa gcagaagtga 120
gcgctgggct gtttttagtg caggctgcgg tgggcagcca tgagaacaaa acctcttctg 180
tatttttttt ttccattagt aaaacacaag acttcagatt cagccgaatt gtggtgtctt 240
acaaggcagg ctttccctac agggggtgga gagaccagcc tttcttcctt tggtaggaat 300
ggcctgagtt ggcgttgttg gcaggctact ggtttgtatg atgtattagt agagcaaccc 360
attaatcttt tgtagtttgt attaaacttg aactgagaaa aaaaaa                                     405

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<210> 219

<211> 216

<212> DNA

<213> Homo sapiens

<220>

<221> unsure
 <222> (207)
 <223> n=A,T,C or G
 <221> unsure
 <222> (210)
 <223> n=A,T,C or G

<400> 219
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 ttaatttacc atgtaaaatt gctgtaaatg ataatgtgta cagattttct gttcaaatat 120
 tcaattgtaa acttcttggt aagactgtta cgtttctatt gcttttgtat gggatattgc 180
 aaaaataaaa aggaaagaac cctcttnaan aaaaaa 216

<210> 220
 <211> 380
 <212> DNA
 <213> Homo sapiens

<400> 220
 cttacaaatt gcccccatgt gtaggggaca cagaaccctt tgagaaaact tagatttttg 60
 tctgtacaaa gtctttgcct ttttccttct tcattttttt ccagtacatt aaatttgtca 120
 atttcatctt tgagggaaac tgattagatg ggttggtgtt gtgttctgat ggagaaaaca 180
 gcacccaag gactcagaag atgattttta cagttcagaa cagatgtgtg caatattggg 240
 gcatgtaata atgttgagtg gcagtcacaaa gtcatgattt ttatcttagt tcttcattac 300
 tgcattgaaa aggaaaacct gtctgagaaa atgcctgaca gtttaattta aaactatggg 360
 gtaagtcttt gacaaaaaaa 380

<210> 221
 <211> 398
 <212> DNA
 <213> Homo sapiens

<400> 221
 ggtagtaag ctgtcgactt tgtaaaaaag ttaaaaatga aaaaaaaagg aaaaatgaat 60
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 gtgagtcctgc aagtgaattt cactgatgtt gatattcatt gtgtgtagtt ttatttcggt 180
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 <212> DNA
 <213> Homo sapiens

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 <222> (49)
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<400> 222

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gatgacttta ggatttgcac ttttcccttt attgcctcat ttcttgtgac gccttgttgg 240
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<210> 223

<211> 200

<212> DNA

<213> Homo sapiens

<400> 223

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agattttctac aggagacagt ggttttattt ggattgtctt ctgtaatagg tttcaataaa 180
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<210> 224

<211> 385

<212> DNA

<213> Homo sapiens

<400> 224

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<210> 225

<211> 560

<212> PRT

<213> Homo sapien

<400> 225

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 20          25          30
Arg Pro Ser Ala Tyr Met Arg Glu His Asn Gln Leu Asn Gly Trp Ser
 35          40          45
Ser Asp Glu Asn Asp Trp Asn Glu Lys Leu Tyr Pro Val Trp Lys Arg
 50          55          60
Gly Asp Met Arg Trp Lys Asn Ser Trp Lys Gly Gly Arg Val Gln Ala
 65          70          75          80
Val Leu Thr Ser Asp Ser Pro Ala Leu Val Gly Ser Asn Ile Thr Phe
          85          90          95
Ala Val Asn Leu Ile Phe Pro Arg Cys Gln Lys Glu Asp Ala Asn Gly
          100          105          110

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Pro	Phe	Pro	His	His	Pro	Gly	Trp	Arg	Arg	Trp	Asn	Phe	Ile	Tyr	Val
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Phe	His	Thr	Leu	Gly	Gln	Tyr	Phe	Gln	Lys	Leu	Gly	Arg	Cys	Ser	Val
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225					230					235					240
Thr	Met	Phe	Gln	Lys	Asn	Asp	Arg	Asn	Ser	Ser	Asp	Glu	Thr	Phe	Leu
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Phe	Leu	Asn	Tyr	Ser	Thr	Ile	Asn	Tyr	Lys	Trp	Ser	Phe	Gly	Asp	Asn
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Gly	Pro	Cys	Pro	Pro	Pro	Pro	Pro	Pro	Pro	Arg	Pro	Ser	Lys	Pro	Thr
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Ile	Thr	Ile	Val	Glu	Gly	Ile	Leu	Glu	Val	Asn	Ile	Ile	Gln	Met	Thr
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Asp	Val	Leu	Met	Pro	Val	Pro	Trp	Pro	Glu	Ser	Ser	Leu	Ile	Asp	Phe
385					390					395					400
Val	Val	Thr	Cys	Gln	Gly	Ser	Ile	Pro	Thr	Glu	Val	Cys	Thr	Ile	Ile
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Asp	Val	Asp	Glu	Met	Cys	Leu	Leu	Thr	Val	Arg	Arg	Thr	Phe	Asn	Gly
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Ser	Gly	Thr	Tyr	Cys	Val	Asn	Leu	Thr	Leu	Gly	Asp	Asp	Thr	Ser	Leu
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 1 5

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<400> 229
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Phe Ser Phe Ala
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Asn His Ser Pro Ser
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Asp Pro Asp Gly
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Pro Asn Ser Asp
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Ile Gln Asp Asp Phe
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Gln Met Asn Ala
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<213> Homo sapiens
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Val Asn His Ser Pro Ser Ile Ser Thr Pro Ala His Ser Ile Pro Gly
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Ser His Ala Met
20

$$\begin{array}{ll} \langle 210 \rangle & 244 \\ \langle 211 \rangle & 20 \end{array}$$

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<213> Homo sapiens

<400> 244

Ala Val Pro Pro Ala Thr Val Glu Ala Phe Val Glu Arg Asp Ser Leu
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His Phe Pro His
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<210> 245

<211> 20

<212> PRT

<213> Homo sapiens

<400> 245

Lys Pro Gly His Trp Thr Tyr Thr Leu Asn Asn Thr His His Ser Leu
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Gln Ala Leu Lys
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<210> 246

<211> 20

<212> PRT

<213> Homo sapiens

<400> 246

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Pro Gly His Trp
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<210> 247

<211> 20

<212> PRT

<213> Homo sapiens

<400> 247

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Phe Tyr Pro Ile
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<210> 248

<211> 20

<212> PRT

<213> Homo sapiens

CCDC117 "CCDC117"

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Gly Ala Asp Val
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<210> 249

<211> 20

<212> PRT

<213> Homo sapiens

<400> 249

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Glu Thr Gly Asp
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<210> 250

<211> 20

<212> PRT

<213> Homo sapiens

<400> 250

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Leu Thr Phe Arg
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<210> 251

<211> 20

<212> PRT

<213> Homo sapiens

<400> 251

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Val Pro Pro Ala
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<210> 252

<211> 153

<212> PRT

<213> Homo sapien

<400> 252

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 Pro Met Gly Asp Val Pro Met Asp Gly Ile Ser Val Ala Asp Ile Gly
 35 40 45
 Ala Ala Val Ser Ser Ile Phe Asn Ser Pro Glu Glu Phe Leu Gly Lys
 50 55 60
 Ala Val Gly Leu Ser Ala Glu Ala Leu Thr Ile Gln Gln Tyr Ala Asp
 65 70 75 80
 Val Leu Ser Lys Ala Leu Gly Lys Glu Val Arg Asp Ala Lys Ile Thr
 85 90 95
 Pro Glu Ala Phe Glu Lys Leu Gly Phe Pro Ala Ala Lys Glu Ile Ala
 100 105 110
 Asn Met Cys Arg Phe Tyr Glu Met Lys Pro Asp Arg Asp Val Asn Leu
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 Glu Asn Gln Gly Ala Phe Lys Gly Met
 145 150

<210> 253
 <211> 462
 <212> DNA
 <213> Homo sapien

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ttttgtttaa	ctttaagaag	gagatataca	tatgcagcat	caccaccatc	accacggagt	5100
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gaaagcta	aataacagca	aaataaaaca	agaatcatat	gaaaaggcaa	atgtcatagt	5340
gactgactgg	tatggggcac	atggagatga	tccatacacc	ctacaataca	gaggggtgtg	5400
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gactgagctt	ccacctctc	ccacattctc	gcttgtagag	gctggtgaca	aagtggctctg	5940
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gcactggact	tacaccctga	acaataccca	tcattctctg	caagccctga	aagtgacagt	6780
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gctgagactc	cttgatgatg	gagcaggtgc	tgatgttata	aaaaatgatg	gaatttactc	7020
gaggtatttt	ttctcctttg	ctgcaaatgg	tagatatagc	ttgaaagtgc	atgtcaatca	7080
ctctcccagc	ataagcacc	cagcccactc	tattccaggg	agtcatgcta	tgtatgtacc	7140
aggttacaca	gcaaacggta	atattcagat	gaatgctcca	aggaaatcag	taggcagaaa	7200

tgaggaggag	cgaaagtggg	gctttagccg	agtcagctca	ggaggctcct	tttcagtget	7260
gggagttcca	gctggccccc	accctgatgt	gtttccacca	tgcaaaatta	ttgacctgga	7320
agctgtaaaa	gtagaagagg	aattgaccct	atcttggaca	gcacctggag	aagactttga	7380
tcagggccag	gctacaagct	atgaaataag	aatgagtaaa	agtctacaga	atatccaaga	7440
tgactttaac	aatgctatgt	tagtaaatac	atcaaagcga	aatcctcagc	aagctggcat	7500
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tggagaaaca	catgaaagcc	acagaattta	tgttgcaata	cgagcaatgg	ataggaactc	7620
cttacagtct	gctgtatcta	acattgcccc	ggcgctctct	tttattcccc	ccaattctga	7680
tcctgtacct	gccagagatt	atcttatatt	gaaaggagtt	ttaacagcaa	tggtttgat	7740
aggaatcatt	tgccttatta	tagttgtgac	acatcatact	ttaagcagga	aaaagagagc	7800
agacaagaaa	gagaatggaa	caaaattatt	ataatgaatt	ctgcagatat	ccatcacact	7860
ggcgccgct	cgagcaccac	caccaccacc	actgagatcc	ggctgctaac	aaagcccga	7920
aggaagctga	gttggtgct	gccaccgctg	agcaataact	agcataaccc	cttggggcct	7980
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<210> 255

<211> 401

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(401)

<223> n = A,T,C or G

<400> 255

gtggccagng	actagaagge	gaggcgccgc	gggaccatgg	cggcggcggc	ggacgagcgg	60
agtccanagg	acggagaaga	cgaggaagag	gaggagcagt	tggttctggt	ggaattatca	120
ggaattattg	attcagactt	cctctcaaaa	tgtgaaaata	aatgcaaggt	tttgggcatt	180
gacactgaga	ggcccattct	gcaagtggac	agctgtgtct	ttgtctggga	gtatgaagac	240
actctangga	cctgtgttat	atgtgaagaa	aatgntnaac	atgctgatac	agaaggcaat	300
aataaaacag	tgctaaaata	taaatgccat	acaatgaaga	agctcagcat	gacaagaact	360
ctcctgacag	agaagaagga	aggagaagaa	aacatangtg	g		401

<210> 256

<211> 401

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(401)

<223> n = A,T,C or G

<400> 256

tggtggncct	gggatgggga	accgcggtgg	cttccngnga	ggtttcggca	ntggcatccg	60
gggcccgggt	cgcgcccgng	gacggggccg	gggcnangc	cgngganctc	gcggangcaa	120
ggccgaggat	aaggagtga	tgcccgtcac	caacttgggc	cgcttgacca	aggacatgaa	180
nancaagccc	ctgnaggaga	tctatntctt	cttccctgcc	ccattaagga	atcaagagat	240
catttgattt	cttccctggg	gcctctctca	aggatnaggt	ttttgaagat	tatgccagtg	300
canaaannan	accccgttgc	ccngtccatc	tncacccaac	ncttccaagg	gcnatttttg	360
tttaggcctc	attncngggg	ggaaccttaa	cccaatttgg	g		401

<210> 257
 <211> 401
 <212> DNA
 <213> Homo sapien

 <220>
 <221> misc_feature
 <222> (1)...(401)
 <223> n = A,T,C or G

<400> 257
 atgtatgtaa aacacttcat aaaatgtaaa gggctataac aaatatgtta taaagtgatt 60
 ctctcagccc tgaggatatac agaatcattt gcctcagact gctgttgat tttaaaattt 120
 ttaaaatatac tgctaagtaa tttgctatgt cttctccac actatcaata tgcttgcttc 180
 taacaggctc cccactttct tttaatgtgc tgttatgagc tttggacatg agataaccgt 240
 gcctgttcag agtgtctaca gtaagagctg gacaaactct ggagggacac agtctttgag 300
 acagctcttt tgggtgcttt ccacttttct gaaaggttca cagtaacctt ctagataata 360
 gaaactccca gttaaagcct angctancaa ttttttttag t 401

<210> 258
 <211> 401
 <212> DNA
 <213> Homo sapien

<400> 258
 ggagcgctag gtcggtgtac gaccgagatt aggggtgcgtg ccagctccgg gaggccgcgg 60
 tgagggggcg ggcccaagct gccgaccga gccgatcgtc aggggtcgcca gcgcctcagc 120
 tctgtggagg agcagcagta gtcggagggt gcaggatatt agaaatggct actccccagt 180
 caattttcat ctttgcaatc tgcattttaa tgataacaga attaatctct gcctcaaaaa 240
 gctactatga tatcttaggt gtgccaaaat cggcatcaga gcgccaaatc aagaaggcct 300
 ttcacaagtt ggccatgaag taccaccctg acaaaaataa gaccagatg ctgaagcaaa 360
 attcagagag attgcagaag catatgaaac actctcagat g 401

<210> 259
 <211> 401
 <212> DNA
 <213> Homo sapien

<400> 259
 attgggtttg gagggaggat gatgacagag gaatgccctt tggccatcac ggttttgatt 60
 ctccagaata ttgtgggttt gatcatcaat gcagtcagt taggctgcat tttcatgaaa 120
 acagctcagg ctacagaag ggcagaaact ttgattttca gccgccatgc tgtgattgcc 180
 gtccgaaatg gcaagctgtg cttcatgttc cgagtgggtg acctgaggaa aagcatgac 240
 attagtgcct ctgtgcgcat ccagggtggtc aagaaaacaa ctacacctga aggggagggtg 300
 gttcctatcc accaactgga cattcctgtt gataacccaa tcgagagcaa taacattttt 360
 ctggtggccc ctttgatcat ctgccacgtg attgacaagc g 401

<210> 260
 <211> 363
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature

<222> (1)...(363)

<223> n = A,T,C or G

<400> 260

aggaganang	gaggggggana	tgaatagggg	tggagagggg	natagtggat	gagcagggca	60
canggagagg	aancagaaag	gagaggcaag	acagggagac	acacancaca	nangangana	120
caggtggggg	ctgggggtggg	gcatggagag	ccttttnangt	cncccaggcc	accctgctct	180
cgctgggctg	ttgaaaccca	ctccatggct	tcctgccact	gcagttgggc	ccagggctgg	240
cttattnctg	gaatgcaagt	ggctgtggct	tggagcctcc	cctctggnnn	anggaaannn	300
attgctccct	tatctgcttg	gaatatctga	gtttttccan	cccggaaata	aaacacacac	360
aca						363

<210> 261

<211> 401

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(401)

<223> n = A,T,C or G

<400> 261

cggtctctcg	ccgtctctcc	gggggtttcgg	ggcacttggg	tcccacagtc	tggctctgct	60
tcaccttccc	ctgacctgag	tagtcgccat	ggcacagggt	ctcagaggca	ctgngactga	120
cttccctgga	tttgatgagc	gggctgatgc	anaaaactctt	cggaaggcta	tgaaaggctt	180
gggcacagat	gaggagagca	tcctgactct	gttgacatcc	cgaagtaatg	ctcagcgcca	240
ggaaatctct	gcagctttta	agactctggt	tggcagggat	cttctggatg	acctgaaatc	300
agaactaact	ggaaaatttg	aaaaattaat	tgtggctctg	atgaaaccct	ctcggcttta	360
tgatgcttat	gaactgaaac	atgccttgaa	gggagctgga	a		401

<210> 262

<211> 401

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(401)

<223> n = A,T,C or G

<400> 262

agtctanaac	atttctaata	ttttgngctt	tcatatatca	aaggagatta	tgtgaaacta	60
tttttaaata	ctgtaaagtg	acatatagtt	ataagatata	tttctgtaca	gtagagaaaag	120
agtttataac	atgaagaata	ttgtaccatt	atacatTTTT	attctcgatc	tcataagaaa	180
ttcaaaagaa	taatgataga	ggtgaaaata	tgtttacttt	ctctaaatca	agcctagttg	240
tcaactcaaa	aattatgntg	catagtttta	ttttgaattt	aggttttggg	actacttttt	300
tccancttca	atgagaaaaat	aaaatctaca	actcaggagt	tactacagaa	gttctaanta	360
tttttttgct	aannagcnaa	aaatataaac	atatgaaaaat	g		401

<210> 263

<211> 401

<212> DNA

<213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(401)
 <223> n = A,T,C or G

<400> 263
 ctgtccgacc aagagaggcc ggccgagccc gaggcttggg cttttgcttt ctggcggagg 60
 gatctgcggc ggtttaggag gcggcgctga tcctgggagg aagaggcagc tacggcggcg 120
 gcggcggtgg cggctagggc ggccggcgaat aaaggggccc ccgcccgggtg atgcgggtgac 180
 cactgcggca ggcccaggag ctgagtgggc cccggccctc agcccgtccc gncggacccg 240
 ctttcctcaa ctctccatct tctcctgccg accgagatcg ccgaggcggn ctacaggtcc 300
 ctancccctt ccccgctcct tccccncccc cgtecccggc ccggggggccg ccgccacccg 360
 cctcccacca tggctctgaa ganaatccac aaggaattga a 401

<210> 264
 <211> 401
 <212> DNA
 <213> Homo sapien

<400> 264
 aacaccagcc actccaggac ccctgaaggc ctctaccagg tcaccagtgt tctgcgccta 60
 aagccacccc ctggcagaaa cttcagctgt gtgttctgga atactcacgt gagggaaactt 120
 actttggcca gcattgacct tcaaagtcag atggaaccca ggacccatcc aacttggctg 180
 cttcacattt tcatcccctc ctgcacatt gctttcattt tcatagccac agtgatagcc 240
 ctaagaaaac aactctgtca aaagctgtat tcttcaaaaag acacaacaaa aagacctgtc 300
 accacaacaa agagggaagt gaacagtgtc gtgaatctga acctgtggtc ttgggagcca 360
 gggtagacctg atatgacatc taaagaagct tctggactct g 401

<210> 265
 <211> 271
 <212> DNA
 <213> Homo sapien.

<220>
 <221> misc_feature
 <222> (1)...(271)
 <223> n = A,T,C or G

<400> 265
 gccacttcct gtggacatgg gcagagcgct gctgccagtt cctggtagcc ttgaccacna 60
 cgctgggggg tctttgtgat ggtcatgggt ctcatcttga cttgggggtg tgggattcaa 120
 gttagaagtt tctagatctg gccgggcgca gtggctcaca cctgtaatcc cagcaactta 180
 ggaggctgag gcaggcggat catgaggtca ggagatcgag accgtcctgg ctaacacagt 240
 gaaaccccgt ctctactaaa aatacaaaaa a 271

<210> 266
 <211> 401
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(401)

CTGTCCGACC AAGAGAGGCC GGCCGAGCCC GAGGCTTGGG CTTTTGCTTT CTGGCGGAGG

<400> 266

<210> 267

<211> 401

<212> DNA

<213> Homo sapien

 $\langle 220 \rangle$

<221> misc feature

 $\langle 222 \rangle \quad (1) \dots (401)$

$\langle 223 \rangle \quad n = A, T, C \text{ or } G$

<400> 267

<210> 268

<211> 223

<212> DNA

<213> Homo sapien

<400> 268

<210> 269

<211> 401

<212> DNA

<213> Homo sapien

<400> 269

actatgtaaa	ccacattgta	ctttttttta	ctttggcaac	aaatatttat	acatacaaga	60
tgctagtcca	tttgaattat	tctcccaact	tatccaagga	tctccagctc	taacaaaatg	120
gtttattttt	attttaaatt	caatagttgt	tttttaaaat	ccaaatcaga	ggtgcaggcc	180
accagttaaa	tgccgtctat	caggttttgt	gccttaagag	actacagagt	caaagctcat	240
tttttaaagga	gtaggacaaa	gttgtcacag	gtttttgttg	ttgtttttat	tgcccccaaa	300
attacatgtt	aattttccatt	tatatcaggg	attctattta	cttgaagact	gtgaagttgc	360
cattttgtct	cattgttttc	tttgacataa	ctaggatcca	t		401

<210> 270
 <211> 401
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(401)
 <223> n = A,T,C or G

<400> 270
 tggctgttga ttcacctcag cactgcttgg tatctgcacc ctacctctct ttagaggctg 60
 ccttgtcaac tgaaaaatgc acctgacttc gagcaagact ctttccttag gttctggatc 120
 tgtttgagcc ccatggcact gagctggaat ctgaggggtct tgttccaagg atgtgatgat 180
 gtggggagaat gttcttttgaa agagcagaaa tccagtctgc atggaaacag cctgtagagn 240
 agaagtttcc agtgataagt gttcactgtt ctaaggaggt acaccacagc tacctgaatt 300
 ttcccaaaaat gagtgcttct gtgcgttaca actggccttt gtacttgact gtgatgactt 360
 tgttttttct tttcaattct anatgaacat gggaaaaaat g 401

<210> 271
 <211> 329
 <212> DNA
 <213> Homo sapien

<400> 271
 ccacagcctc caagtcaggt ggggtggagt cccagagctg cacaggggtt ggcccaagtt 60
 tctaaggagag gcacttctc ccctcgccca tcagtgccag cccctgctgg ctggtgcctg 120
 agcccctcag acagccccct gcccgcagag cctgccttct cagggacttc tgcggggcct 180
 gaggcaagcc atggagttag acccaggagc cggacacttc tcaggaaatg gcttttccca 240
 acccccagcc cccacccggt ggttcttctc gttctgtgac tgtgtatagt gccaccacag 300
 cttatggcat ctcataggag acaaaaaaa 329

<210> 272
 <211> 401
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(401)
 <223> n = A,T,C or G

<400> 272
 nggctgntaa cntcggaggt nacttcctgg actatcctgg agacccctc cgcttccacg 60
 nncatnatat cntcatngc tgggcccctn angacacnat cccactccaa cacctgngng 120
 atgctggnen cctnggaacc ancntcagaa ngaccctgnt cntntgtnnt ccgcaanctg 180
 aagannaangc gggntacacc tncntgcant ggnccaacct gcngggaact ntacacacct 240
 acgggatgtg gctgcgccan gagccaagag cntttctgga tgattcccca gcctcttgnn 300
 agggantcta caacattgct nnntacctt ntcnncngc nnnntntgga ntacaggngn 360
 tnntaacact acatcttttt tactgcncn tnccttggtgg g 401

<210> 273
 <211> 401

<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(401)
<223> n = A,T,C or G

<400> 273

cagcaccatg	aagatcaaga	tcatcgccacc	cccagagcgc	aagtactcgg	tgtggatcgg	60
tggtccatc	ctggcctcac	tgtccacctt	ccagcagatg	tggtattagca	agcaggagta	120
cgacgagtcg	ggccccctcca	tcgtccaccg	caaagtcttc	taaaccggact	cagcagatgc	180
gtagcatttg	ctgcatgggt	taattgagaa	tagaaatttg	cccctggcaa	atgcacacac	240
ctcatgctag	cctcacgaaa	ctggaataag	ccttcgaaaa	gaaattgtcc	ttgaagcttg	300
tatctgatat	cagcactgga	ttgtagaact	tggtgctgat	tttgaccttg	tattgaagtt	360
aactgttccc	cttggtatta	acgtgtcagg	gctgagtgn	c		401

<210> 274
<211> 401
<212> DNA
<213> Homo sapien

<400> 274

ccacccacac	ccaccgcgcc	ctcgttcgcc	tcttctccgg	gagccagtc	gcgccaccgc	60
cgccgcccag	gccatcgcca	ccctccgcag	ccatgtccac	caggtcctg	tcctcgtcct	120
cctaccgcag	gatgttcggc	ggccccggca	ccgcgagccg	gccgagctcc	agccggagct	180
acgtgactac	gtccacccgc	acctacagcc	tgggcagcgc	gctgcgcccc	agcaccagcc	240
gcagcctcta	cgctcgtcc	ccgggcggcg	tgtatgccac	gcgctcctct	gccgtgcgcc	300
tgccggagcag	cgtgcccggg	gtgcggctcc	tgcaggactc	ggtggacttc	tcgctggccg	360
acgccatcaa	caccgagttc	aagaacaccc	gcaccaacga	g		401

<210> 275
<211> 401
<212> DNA
<213> Homo sapien

<400> 275

ccacttccac	cactttgtgg	agcagtgcct	tcagcgcaac	ccggatgcc	ggtatccctg	60
ctggcctggg	cctgggcttc	gggagagcag	aggggtgctca	ggagggtgtaag	gccaggggtg	120
gaagggaactt	acctcccaaa	ggttctgcag	gggaatctgg	agctacacac	aggagggatc	180
agctcctggg	tgtgtcagag	gccagcctgg	ggagctctgg	ccactgcttc	ccatgagctg	240
agggagaggg	agaggggacc	cgaggctgag	gcataagtgg	caggatttcg	ggaagctggg	300
gacacggcag	tgatgctgcg	gtctctcttc	ccctttccct	ccaggcccag	tgccagcacc	360
ctcctgaacc	actctttctt	caagcagatc	aagcgacgtg	c		401

<210> 276
<211> 401
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(401)
<223> n = A,T,C or G

<400> 276
 tctgatattg ntacccttga gccacctaag ttagaagaaa ttggaaatca agaagttgtc 60
 attgttgaag aagcacagag ttcagaagac tttaacatgg gctcttcctc tagcagccag 120
 tatactttct gtcagccaga aactgtattt tcattctcagc ctagtgatga tgaatcaagt 180
 agtgatgaaa ccagtaatca gcccagtcct gcctttagac gacgccgtgc taggaagaag 240
 accgtttctg cttcagaatc tgaagaccgg ctagtgtgtg aacaagaaac tgaaccttct 300
 aaggagttga gtaaactgca gttcagtagt ggtctcaata agtgtgttat acttgctttg 360
 gtgattgcaa tcagcatggg atttggccat ttctatggca c 401

<210> 277
 <211> 401
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(401)
 <223> n = A,T,C or G

<400> 277
 aactttggca acatatctca gcaaaaacta cagctatggt attcatgcc aataaaaagc 60
 tgtgcagagg agtggctgca atgaggtcac aacgggtgtg gatgtaaaag agatcttcaa 120
 gtcctcatca cccatccctc gaactcaagt cccgctcatt acaaattctt cttgccagt 180
 tccacacatc ctgccccatc aagatgttct catcatgtgt tacgagnggc gctcaaggat 240
 gatgcttctt gaaaattgct tagttgaaaa atggagagat cagcttagta aaagatccat 300
 acagtgggaa gagaggctgc aggaacagcg ganaacagtt caggacaaga agaaaacagc 360
 cgggcgcacc agtcgtagta atccccccaa accaaaggga a 401

<210> 278
 <211> 401
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(401)
 <223> n = A,T,C or G

<400> 278
 aatgagtgtg agaccacaaa tgaatgccgg gaggatgaaa tgtgttgga ttatcatggc 60
 ggcttccgtt gttatccacg aaatccttgt caagatccct acattctaac accagagaac 120
 cgatgtgttt gcccagtcct aaatgccatg tgccgagaac tgccccagtc aatagtctac 180
 aaatacatga gcatccgata tgataggtct gtgccatcag acatcttcca gatacaggcc 240
 acaactatct atgccaacac catcaatact tttcggatta aatctggaaa tgaaaatgga 300
 gagtctacct acgacaacaa anccctgtaa gtgcaatgct tgtgctcgtg aagncattat 360
 caggaccaag agaacatatc gtggacctgg agatgctgac a 401

<210> 279
 <211> 401
 <212> DNA
 <213> Homo sapien

<220>

CGCGT = GCGCGT

<221> misc_feature
 <222> (1)...(401)
 <223> n = A,T,C or G

<400> 279
 aaattattgc ctctgataca tacctaagtn aacanaacat taatacctaa gtaaacataa 60
 cactacttgg agggttgcag nttctaantg aaactgtatt tgaaactttt aagtatactt 120
 taggaaacaa gcatgaacgg cagtctagaa taccagaaac atctacttgg gtagcttggn 180
 gccattatcc tgtggaatct gatatgtctg gnagcatgtc attgatggga catgaagaca 240
 tctttggaaa tgatgagatt atttcctgtg ttaaaaaaaaa aaaaaatctt aaattcctac 300
 aatgtgaaac tgaaactaat aattttgatc ctgatgtatg ggacagcgta tctgtaccag 360
 gctctaaata acaaaagnta gggngacaag nacatgttcc t 401

<210> 280
 <211> 326
 <212> DNA
 <213> Homo sapien

<400> 280
 gaagtggaat tgtataattc aattcgataa ttgatctcat gggctttccc tggaggaaag 60
 gttttttttg ttgttttttt tttaagaact tgaaacttgt aaactgagat gtctgtagct 120
 tttttgcca tctgtagtgt atgtgaagat ttcaaaacct gagagcactt tttctttgtt 180
 tagaattatg agaaaggcac tagatgactt taggatttgc atttttccct ttattgcctc 240
 atttcttggt acgccttggt ggggagggaa atctgtttat tttttcctac aaataaaaag 300
 ctaagattct atatcgcaaa aaaaaa 326

<210> 281
 <211> 374
 <212> DNA
 <213> Homo sapien

<400> 281
 caacgcgttt gcaaattatc cctgggtagc ctacttcctt acccccgaat attggtaga 60
 tcgagcaatg gcttcaggac atgggttctc ttctcctgtg atcattcaag tgctcactgc 120
 atgaagactg gcttgtctca gtgtttcaac ctaccagggt ctgtctcttg gtccacacct 180
 cgctccctgt tagtgccgta tgacagcccc catcaaatga ccttggccaa gtcacggttt 240
 ctctgtgggtc aagggttggtt ggctgattgg tggaaagtag ggtggaccaa aggaggccac 300
 gtgagcagtc agcaccagtt ctgcaccagc agcgccctcg tcctagtggg tgttcctggt 360
 tctcctggcc ctgg 374

<210> 282
 <211> 404
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(404)
 <223> n = A,T,C or G

<400> 282
 agtgtggtgg aattccccga tcctanncgc cgactcacac aaggcagagt ngccatggag 60
 aaaattccag tgtcagcatt cttgctcctt gtggccctct cctacactct ggccagagat 120
 accacagtca aacctgnagc caaaaaggac acaaaggact ctcgaccaa actgccccan 180


```

accctctcca gaggttgggg tgaccaactc atctggactc anacatatga agaagctcta      240
tataaatcca agacaagcaa caaacccttg atgattattc atcacttgga tgagtgccca      300
cacagtcaag ctttaaagaa agtgtttgct gaaaataaag aaatccagaa attggcagag      360
cagtttgtcc tcctcaatct ggtttatgaa acaactgaca aaca                        404

```

```

<210> 283
<211> 184
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(184)
<223> n = A,T,C or G

```

```

<400> 283
agtgtggtgg aattcacttg cttaanttgt gggcaaaaga gaaaaagaag gattgatcag      60
agcattgtgc aatacagttt cattaactcc ttccctcgct cccccaaaaa tttgaatttt      120
ttttcaaca ctcttacacc tgttatggaa aatgtcaacc tttgtaagaa aaccaaataa      180
aaaa                                              184

```

```

<210> 284
<211> 421
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(421)
<223> n = A,T,C or G

```

```

<400> 284
ctattaatcc tgccacaata tttttaatta cgtacaaaga tctgacatgt caccagggga      60
cccatttcac ccactgctct gtttggccgc cagtcttttg tctctctctt cagcaatggt      120
gaggcggata ccctttcctc ggggaanana aatccatggt ttgttgccct tgccaataac      180
aaaaatgttg gaaagtcgag tggcaaagct gttgccattg gcatctttca cgtgaaccac      240
gtcaaaagat ccagggtgcc tctctctggt ggtgatcaca ccaattcttc ctagggttagc      300
acctccagtc accatacaca ggttaccagt gtcgaacttg atgaaatcag taatcttgcc      360
agtctctaaa tcaatctgaa tggtatcatt caccttgatg aggggatcgg ggtagcggat      420
g                                              421

```

```

<210> 285
<211> 361
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(361)
<223> n = A,T,C or G

```

```

<400> 285
ctgggtggta actctttatt tcattgtccg gaanaaagat gggagtggga acagggtgga      60
cactgtgcag gcttcagctt ccactccggg caggattcag gctatctggg accgcaggga      120

```

```

ctgccagggtg cacagccctg gctcccagg caggcaggca aggtgacggg actggaagcc 180
cttttcanag ccttggagga gctgggccgt ccacaagcaa tgagtgccac tctgcagttt 240
gcaggggatg gataaacagg gaaacactgt gcattcctca cagccaacag tgtaggtctt 300
ggtgaagccc cggcgctgag ctaagctcag gctgttccag ggagccacga aactgcaggt 360
a 361

```

```

<210> 286
<211> 336
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(336)
<223> n = A,T,C or G

```

```

<400> 286
tttgagtggc agcgctttaa tttgtggggg ccttcaaggn agggtcgtgg ggggcagcgg 60
ggaggaanag ccganaaaact gtgtgaccgg ggcctcaggt ggtgggcatt gggggctcct 120
cttgcanatg cccattggca tcaccggtgc agccattggt gccagcgggt accggtcctt 180
tcttgttcaa catagggtag gtggcagcca cgggtccaac tcgcttgagg ctgggacctg 240
ggcgctccat tttgtgttcc angagcatgt ggttctgtgg cgggagcccc acgcaggccc 300
tgaggatgtt ctgatgcag ctgcgctggc ggaaaa 336

```

```

<210> 287
<211> 301
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G

```

```

<400> 287
tgggtaccaa atttntttat ttgaaggaat ggnacaaatc aaanaactta agnggatgtt 60
ttggtacaac ttatanaaaa ggnaaaggaa accccaacat gcatgcnctg ccttgngnac 120
caggaagtc accccacggc tatggggaaa ttancccgag gcttancttt cattatcact 180
gtctcccagg gngngcttgt caaaaanata ttccnccaag ccaaattcgg gcgctcccat 240
nttgcnaag ttggtcacgt ggtcacccaa ttctttgatg gctttcacct gctcattcag 300
g 301

```

```

<210> 288
<211> 358
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(358)
<223> n = A,T,C or G

```

```

<400> 288
aagtttttaa actttttatt tgcatattaa aaaaattgng cattccaata attaaaaatca 60

```

```

tttgaacaaa aaaaaaaatg gcactctgat taaactgcat tacagcctgc aggacacctt 120
gggccagctt ggttttactc tanatttcac tgtcgtccca cccacttct tccacccac 180
ttcttccttc accaacaatgc aagttctttc cttccctgcc agccanatag atagacagat 240
gggaaaggca ggcgcggcct tcgttgtcag tagttctttg atgtgaaagg ggcagcacag 300
tcatttaaac ttgatccaac ctctttgcat cttacaaagt taaacagcta aaagaagt 358

```

```

<210> 289
<211> 462
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(462)
<223> n = A,T,C or G

```

```

<400> 289
ggcatcagaa atgctgttta tttctctgct gctcccaagc tggctggcct ttgcagagga 60
gcagacaaca gatgcatagt tgggganaaa gggaggacag gttccaggat agagggtgca 120
ggctgaggga ggaagggtaa naggaaggaa ggccatcctg gatccccaca tttcagtctc 180
anatgaggac aaagggactc ccaagcccc aaatcatcan aaaacaccaa ggagcaggag 240
gagcttgagc aggcccccag gagcctcana gccataccag ccaactgtcta cttcccatcc 300
tcctctccca ttccctgtct gcttcanacc acctcccagc taagccccag ctccattccc 360
ccaatcctgg cccttgccag cttgacagtc acagtgcctg gaattccacc actgaggctt 420
ctcccagttg gattaggacg tcgccctgtt agcatgctgc cc 462

```

```

<210> 290
<211> 481
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature
<222> (1)...(481)
<223> n = A,T,C or G

```

```

<400> 290
tactttccta aactttatta aagaaaaaag caataagcaa tggnggtaaa tctctanaac 60
ataccaatt ttctgggctt cctccccga gaatgtgaca ttttgatttc caaacatgcc 120
anaagtgtat ggttcccaac tgtactaaag taggtganaa gctgaagtcc tcaagtgttc 180
atcttccaac ttttccagc ctgtgggtctg tctttggatc agcaataatt gcctgaacag 240
ctactatggc ttcgttgatt tttgtctgta gctctctgag ctctctatg tgcagcaatc 300
gcanaatttg agcagcttca ttaanaactg catctcctgt gtcaaaacca anaatatgtt 360
tgtctaaagc aacaggtaag ccctcttttg tttgatttgc cttancaact gcatcctgtg 420
tcaggcgctc ctgaaccaa atccgaattg ccttaagcat taccaggtaa tcatcatgac 480
g 481

```

```

<210> 291
<211> 381
<212> DNA
<213> Homo sapien

```

```

<220>
<221> misc_feature

```

<222> (1)...(381)

<223> n = A,T,C or G

<400> 291

tcataagtaat	gtaaaacat	ttgtttaatt	ctaaatcaaa	tcactttcac	aacagtga	60
attagtact	ggtaaggng	tgccactgta	catatcatca	ttttctgact	ggggtcagga	120
cctggctcta	gtccacaagg	gtggcaggag	gaggggtggag	gctaanaaca	cagaaaacac	180
acaaaanaaa	ggaaagctgc	cttggcanaa	ggatgaggng	gtgagcttgc	cgaaggatgg	240
tgggaagggg	gctccctgtt	ggggccgagc	caggagtccc	aagtcagctc	tcctgcctta	300
cttagctcct	ggcanagggt	gagtggggac	ctacgaggtt	caaaatcaaa	tggcatttgg	360
ccagcctggc	tttactaaca	g				381

<210> 292

<211> 371

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(371)

<223> n = A,T,C or G

<400> 292

gaaaaataa	tccgtttaat	tgaaaaacct	gnaggatact	attccactcc	cccanatgag	60
gaggtgagg	anaccaaacc	cctacatcac	ctcgtagcca	cttctgatac	tcttcacgag	120
gcagcaggca	aagacaattc	ccaaaacctc	nacaaaagca	attccaaggg	ctgctgcagc	180
taccaccanc	acatttttcc	tcagccagcc	cccaatcttc	tccacacagc	cctccttatg	240
gatcgcttc	tcgttgaaat	taatcccaca	gccacagta	acattaatgc	ancaggagtc	300
ggggactcgg	ttcttcgaca	tggaagggat	tttctcccaa	tctgtgtagt	tagcagcccc	360
acagcactta	a					371

<210> 293

<211> 361

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature

<222> (1)...(361)

<223> n = A,T,C or G

<400> 293

gatttaaaag	aaaacacttt	attgttcagc	aattaaaagt	tagccaaata	tgtatttttc	60
tccataattt	attgngatgt	tatcaacatc	aagtaaaatg	ctcattttca	tcatttgctt	120
ctgttcatgt	tttcttgaac	acgtcttcaa	ttttccttcc	aaaatgctgc	atgccacact	180
tgaggtaacg	aagcanaagt	atttttaaac	atgacagcta	anaacattca	tctacagcaa	240
cctatatgct	caatacatgc	cgcgtgatcc	tagtagtttt	ttcacaacct	tctacaagtt	300
tttggaanaa	atctgttatg	atgactttca	tacaccttca	cctcaaaggc	tttcttgcac	360
c						361

<210> 294

<211> 391

<212> DNA

<213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(391)
 <223> n = A,T,C or G

<400> 294
 tatttttaaag ttttaattatg attcanaaaa aatcgagcga ataactttct ctgaaaaaat 60
 atattgactc tgtatanacc acagttattg gggganaagg gctggtaggt taaattatcc 120
 tattttttat tctgaaaatg atattaatan aaagtcccgt ttccagtctg attataaaga 180
 tacatatgcc caaaatggct ganaataaat acaacaggaa atgcaaaagc tgtaaagcta 240
 agggcatgca ananaaaatc tcanaatacc caaagnggca acaaggaacg tttggctgga 300
 atttgaagtt atttcagtca tctttgtctt tggtccatg tttcaggatg cgtgtgaact 360
 cgatgtaatt gaaattcccc tttttatcaa t 391

<210> 295
 <211> 343
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(343)
 <223> n = A,T,C or G

<400> 295
 ttcttttggt ttattgataa cagaaactgt gcataattac agatttgatg aggaatctgc 60
 aaataataaa gaatgtgtct actgccagca aaatacaatt attccatgcc ctctcaacat 120
 acaaatatag agttcttcac accanatggc tctggtgtaa caaagccatt ttanatgttt 180
 aattgtgctt ctacaaaacc ttcanagcat gaggtagttt cttttaccta cnatattttc 240
 cacatttcca ttattacact tttagtgagc taaaatcctt ttaacatagc ctgcggatga 300
 tctttcacaa aagccaagcc tcatttaca agggtttatt tct 343

<210> 296
 <211> 241
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(241)
 <223> n = A,T,C or G

<400> 296
 ttcttgata ttggttgttt ttgtgaaaaa gtttttgttt ttcttctcag tcaactgaat 60
 tatttctcta ctttgccctc ctgatgccca catgananaa cttaanataa tttctaacag 120
 cttccacttt ggaaaaaaaa aaacctgtt ttcctcatgg aaccccagga gttgaaagtg 180
 gatanatcgc tctcaaaatc taaggctctg ttcagcttta cattatgtta cctgacgttt 240
 t 241

<210> 297
 <211> 391
 <212> DNA
 <213> Homo sapien

<400> 297						
gttggtggctg	anaatgctgg	agatgctcag	ttctctccct	cacaaggtag	gccacaaatt	60
cttggtgggtg	ccctcacatc	tggggtcttc	aggcaccagc	catgcctgcc	gaggagtgct	120
gtcaggacan	accatgtcgg	tgctaggccc	aggcacagcc	caaccactcc	tcatccaagt	180
ctctcccagg	tttctgggtc	cgatgggcaa	ggatgacccc	tccagtgggt	ggtaccccac	240
catcccacta	ccctccat	gctctcactc	tccatcaggt	ccccaatcct	ggcttcacct	300
ttcacgaact	ctcaaagaaa	aggaaggata	aaacctaata	aaaccagaca	gaagcagctc	360
tggaaaagta	caaaaagaca	gccagagggtg	t			391

```
<220>
<221> misc_feature
<222> (1)...(321)
<223> n = A,T,C or G
```

<400> 298						
caagccaaac	tgtntccagc	tttattaaan	atactttcca	taaacaatca	tggattttca	60
ggcaggacat	gggcanacaa	tcgттаacag	tatacaacaa	ctttcaaact	cccttnttca	120
atggactacc	aaaaatcaaa	aagccactat	aaaacccaat	gaagtcttca	tctgatgctc	180
tgaacagga	aagtttaaag	ngaggggttg	catttcacat	ttagcatggt	gtttaacaac	240
ttttcacaa	ccgaccctga	ctttcaggaa	gtgaaatgaa	aatggcanaa	tttatctgaa	300
natccacaat	ctaaaaatgg	a				321

```
<210> 299
<211> 401
<212> DNA
<213> Homo sapien
```

```
<220>  
<221> misc_feature  
<222> (1)...(401)  
<223> n = A,T,C or G
```

<400> 299						
tatcataaag	agtgttgaag	tttattttatt	atagcaccat	tgagacattt	tgaaattgga	60
attggtaaaa	aaataaaaaca	aaaagcattt	gaattgtatt	tgngngaaca	gcaaaaaaag	120
agaagtatca	tttttctttg	tcaaattata	ctgtttccaa	acattttgga	aataaataac	180
tggaattttg	tcggtcactt	gcaactggttg	acaagattag	aacaagaggga	acacatatgg	240
agttaaattt	tttttgttgg	gatttcanat	agagtttggt	ttataaaaag	caacacgggc	300
caacgtccac	accaaattct	tgatcaggac	caccaatgtc	ataggngnga	atatctacaa	360
taggtagtct	cacagccttg	cgtgttcgat	attcaaagac	t		401

$\langle 210 \rangle$	300
$\langle 211 \rangle$	188

<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(188)
<223> n = A,T,C or G

<400> 300
tgaatgcttt gtcataat gaaagttaaa gtgcaataat gtttgaanac aataagtgg 60
ggtgtatctt gtttctaata agataaactt ttttgtcttt gctttatctt attagggagt 120
tgtatgtcag tgtataaaac atactgtgtg gtataacagg cttaataaat tctttaaaag 180
gaaaaaaa 188

<210> 301
<211> 291
<212> DNA
<213> Homo sapien

<400> 301
aagattttgt tttattttat tatggctaga aagacactgt tatagccaaa atcggcaatg 60
acactaaaga aatcctctgt gcttttcaat atgcaaata atttcttcca agagttgccc 120
tgggtgtgact tcaagagttc atgttaactt cttttctgga aacttccttt tcttagttgt 180
tgtattcttg aagagcctgg gccatgaaga gcttgccctaa gttttgggca gtgaactcct 240
tgatgttctg gcagtaagtg tttatctggc ctgcaatgag cagcgagtcc a 291

<210> 302
<211> 341
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(341)
<223> n = A,T,C or G

<400> 302
tgatttttca taattttatt aaatnatcac tgggaaaact aatggttcgc gtatcacaca 60
attacactac aatctgatag gagtggtaaa accagccaat ggaatccagg taaagtacaa 120
aaacgccacc ttttattgtc ctgtcttatt tctcgggaag gagggttcta ctttacacat 180
ttcatgagcc agcagtggac ttgagttaca atgtgtaggt tccttgtggg tatagctgca 240
gaagaagcca tcaaattctt gaggacttga catctctcgg aaagaagcaa actagtggat 300
cccccggtc gcaggaattc gatatcaagc ttatcgatac c 341

<210> 303
<211> 361
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(361)
<223> n = A,T,C or G

aatatgtaaa	ggtaataaact	tttattatat	taaagacaat	gcaaacgaaa	aacagaattg	60
agcagtgcaa	aattttaaagg	actgttttgt	tctcaaagtt	gcaagtttca	aagccaaaag	120
aattatatgt	atcaaataata	taagtaaaaa	aaagtttagac	tttcaagcct	gtaatcccag	180


```

cactttggga ggctgaggca ggtggatcac taacattaaa aagacaacat tagattttgt 240
cgatttatag caattttata aatatataac tttgtcactt ggatcctgaa gcaaaataat 300
aaagtgaatt tgggattttt gtacttggtg aaaagttaa caccctaaat tcacaactag 360
tggatcccc gggtgcagg aattcgatat caagcttatt gataccgtcg acctcgaggg 420
ggggcccggt acccaattcg ccctatagtg agtcgta 457

```

```

<210> 307
<211> 491
<212> DNA
<213> Homo sapien

```

```

<400> 307
gtgcttgga ggaacccggc gctcgttccc caccgccggc ggccgcccac agccagccct 60
ccgtcacctc ttcaccgcac cctcggactg cccaaggcc cccgcgcgcg ctccagcgcc 120
gcgcagccac cgccgcgcgc gccgcctctc cttagtgcgc gccatgacga ccgcgtccac 180
ctcgcaggtg cgccagaact accaccagga ctcagaggcc gccatcaacc gccagatcaa 240
cctggagctc tacgcctcct acgtttacct gtccatgtct tactactttg accgcgatga 300
tgtggctttg aagaactttg ccaaatactt tcttcaccaa tctcatgagg agagggaaca 360
tgctgagaaa ctgatgaagc tgcagaacca acgagggtggc cgaatcttcc ttcaggatat 420
caagaaacca gactgtgatg actgggagag cgggctgaat gcaatggagt gtgcattaca 480
tttggaaaaa a 491

```

```

<210> 308
<211> 421
<212> DNA
<213> Homo sapien

```

```

<400> 308
ctcagcgctt cttctttctt ggtttgatcc tgactgctgt catggcgtgc cctctggaga 60
aggccctgga tgtgatggtg tccaccttcc acaagtactc gggcaaagag ggtgacaagt 120
tcaagctcaa caagtcagaa ctaaaggagc tgctgacccg ggagctgccc agcttcttgg 180
ggaaaaggac agatgaagct gctttccaga agctgatgag caacttgga agcaacaggg 240
acaacgaggt ggacttccaa gactactgtg tcttctgtgc ctgcatcgcc atgatgtgta 300
acgaattctt tgaaggcttc ccagataagc agcccaggaa gaaatgaaaa ctctctgat 360
gtggttgggg ggtctgccag ctggggccct cctgtcgcgc agtgggcact ttttttttc 420
c 421

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<210> 309
<211> 321
<212> DNA
<213> Homo sapien

```

```

<400> 309
accaaattggc ggatgacgcc ggtgcagcgg gggggcccgg gggccctggt ggcctggga 60
tggggaaccg cggtggcttc cgcgagggtt tcggcagtgg catccggggc cggggtcgcg 120
gccgtggacg gggccggggc cgaggccgcg gagctcgcgg aggcaaggcc gaggataagg 180
agtggatgcc cgtcaccaag ttgggcccgt tggtaagga catgaagatc aagtccttgg 240
aggagatcta tctcttctcc ctgcccatta agaatcaga gatcattgat ttcttcttgg 300
gggcctctct caaggatgag g 321

```

```

<210> 310
<211> 381
<212> DNA
<213> Homo sapien

```

<400> 310

ttaaccagcc atattggctc aataaatagc ttcggttaagg agttaatttc cttctagaaa	60
tcagtgccta tttttcctgg aaactcaatt ttaaatagtc caattccatc tgaagccaag	120
ctgttgcat tttcattcgg tgacattctc tcccatgaca cccagaagg gcagaagaac	180
cacatTTTTt atttatagat gtttgcaccc tttgtattaa aattattttg aaggggttgc	240
ctcattggat ggctTTTTt tttttcctcc agggagaagg ggagaaatgt acttggaat	300
taatgtatgt ttacatctct ttgcaaattc ctgtacatag agatatattt ttttaagtgtg	360
aatgtaacaa catactgtga a	381

<210> 311

<211> 538

<212> DNA

<213> Homo sapien

<400> 311

tttgaattta caccaagaac ttctcaataa aagaaaatca tgaatgctcc acaatttcaa	60
cataccacaa gagaagttaa tttcttaaca ttgtgttcta tgattatttg taagaccttc	120
accaagtctt gatattcttt aaagacatag ttcaaaattg cttttgaaaa tctgtattct	180
tgaaaatata cttgttgtgt attaggtttt taaataccag cttaaaggatt acctcactga	240
gtcatcagta cctcctatt cagctcccca agatgatgtg tttttgctta ccctaagaga	300
ggttttcttc ttatttttag ataattcaag tgcttagata aattatgttt tctttaagtg	360
tttatggtaa actcttttaa agaaaattta atatgttata gctgaatctt tttggtaact	420
ttaaatcttt atcatagact ctgtacatat gttcaaatta gctgcttgcc tgatgtgtgt	480
atcatcgggtg ggatgacaga acaaacatat ttatgatcat gaataatgtg ctttgtaa	538

<210> 312

<211> 176

<212> DNA

<213> Homo sapien

<400> 312

ggaggagcag ctgagagata gggtcagtga atgcggttca gcctgctacc tctcctgtct	60
tcatagaacc attgccttag aattattgta tgacacgttt tttgttggtt aagctgtaag	120
gttttgttct ttgtgaacat gggatatttg aggggagggt ggagggagta gggaag	176

<210> 313

<211> 396

<212> DNA

<213> Homo sapien

<400> 313

ccagcacccc caggccctgg gggacctggg ttctcagact gccaaagaag ccttgccatc	60
tggcgtctcc atggctcttg caacatctcc ccttcgtttt tgaggggggtc atgccggggg	120
agccaccagg cctcactgg gttcggagga gagtcaggaa gggccaagca cgacaaagca	180
gaaacatcgg atttggggaa cgcgtgtcaa tcccttgtgc cgcagggctg ggaggagag	240
actgttctgt tcttgtgta actgtgtgc tgaaagacta cctcgttctt gtcttgatgt	300
gtcaccgggg caactgcctg gggcgggga tgggggcagg gtggaagcgg ctccccattt	360
tataccaaag gtgctacatc tatgtgatgg gtgggg	396

<210> 314

<211> 311

<212> DNA

<213> Homo sapien

<400> 314

cctcaacatc	ctcagagagg	actggaagcc	agtccttacg	ataaactcca	taatttatgg	60
cctgcagtat	ctcttcttgg	agcccaaccc	cgaggaccca	ctgaacaagg	aggccgcaga	120
ggtcctgcag	aacaaccggc	ggctgtttga	gcagaacgtg	cagcgctcca	tgcgggggtg	180
ctacatcggc	tccacctact	ttgagcgctg	cctgaaatag	ggttggcgca	taccaccccc	240
cgccacggcc	acaagccctg	gcatcccctg	caaatattta	ttggggggcca	tgggtagggg	300
tttggggggc	g					311

<210> 315

<211> 336

<212> DNA

<213> Homo sapien

<400> 315

tttagaacat	ggttatcatc	caagactact	ctaccctgca	acattgaact	cccaagagca	60
aatccacatt	cctcttgagt	tctgcagctt	ctgtgtaa	agggcagctg	tcgtctatgc	120
cgtagaatca	catgatctga	ggaccattca	tggaaagctgc	taaatagcct	agtctgggga	180
gtcttccata	aagttttgca	tggagcaaac	aaacaggatt	aaactagggt	tggttccttc	240
agccctctaa	aagcataggg	cttagcctgc	aggcttcctt	gggctttctc	tgtgtgtgta	300
gttttgtaaa	cactatagca	tctgttaaga	tccagt			336

<210> 316

<211> 436

<212> DNA

<213> Homo sapien

<400> 316

aacatggtct	gcgtgcctta	agagagacgc	ttcctgcaga	acaggacctg	actacaaaga	60
atgtttccat	tggaaattgtt	ggtaaagact	tggagtttac	aatctatgat	gatgatgatg	120
tgtctccatt	cctggaaggt	cttgaagaaa	gaccacagag	aaaggcacag	cctgctcaac	180
ctgctgatga	acctgcagaa	aaggctgatg	aaccaatgga	acattaagtg	ataagccagt	240
ctatatatgt	attatcaaat	atgtaagaat	acaggcacca	catactgatg	acaataatct	300
atactttgaa	ccaaaagttg	cagagtgggtg	gaatgctatg	ttttaggaat	cagtcagat	360
gtgagttttt	tccaagcaac	ctcactgaaa	cctatataat	ggaatacatt	tttctttgaa	420
agggtctgta	taatca					436

<210> 317

<211> 196

<212> DNA

<213> Homo sapien

<400> 317

tattccttgt	gaagatgata	tactatTTTT	gttaagcgtg	tctgtattta	tgtgtgagga	60
gctgctggct	tgcagtgcgc	gtgcacgtgg	agagctgggtg	cccggagatt	ggacggcctg	120
atgtccctc	ccctgccttg	gtccagggaa	gctggccgag	ggtcctggct	cctgaggggc	180
atctgccct	ccccca					196

<210> 318

<211> 381

<212> DNA

<213> Homo sapien

<220>

<221> misc_feature
 <222> (1)...(381)
 <223> n = A,T,C or G

<400> 318
 gacgcttnng ccgtaacgat gatcggagac atcctgctgt tcgggacgtt gctgatgaat 60
 gccggggcgg tgctgaactt taagctgaaa aagaaggaca cncagggctt tggggaggag 120
 tncagggagc ccaacacagg tgacaacatc cgggaattct tgctgancct cagatacttt 180
 cnaatcttca tcncctgtg gaacatcttc atgatgttct gcatgattgt gctgntcggc 240
 tcttgaatcc cancgatgaa accannaact cactttcccg ggatgccgan tctccattcc 300
 tccattcctg atgacttcaa naatgttttt gaccaaaaaa ccgacaacct tcccagaaaag 360
 tccaagctcg tgggtggngg a 381

<210> 319
 <211> 506
 <212> DNA
 <213> Homo sapien

<400> 319
 ctaagcttta cgaatggggt gacaacttat gataaaaact agagctagtg aattagccta 60
 tttgtaaata cctttgttat aattgatagg atacatcttg gacatggaat tgttaagcca 120
 cctctgagca gtgtatgtca ggacttgctc attaggttgg cagcagaggg gcagaaggaa 180
 ttatacaggt agagatgtat gcagatgtgt ccatatatgt ccatatttac attttgatag 240
 ccattgatgt atgcatctct tggctgtact ataagaacac attaatcaa tggaaataca 300
 ctttgcta attttaattg tatagatctg ctaatgaatt ctcttaaaaa catactgtat 360
 tctgttgctg tgtgtttcat tttaaattga gcattaaggg aatgcagcat ttaaatcaga 420
 actctgccaa tgcttttatc tagaggcgtg ttgccatttt tgtcttatat gaaatttctg 480
 tccaagaaa ggcaggatta catctt 506

<210> 320
 <211> 351
 <212> DNA
 <213> Homo sapien

<400> 320
 ctgacctgca ggacgaaacc atgaagagcc tgatccttct tgccatcctg gccgccttag 60
 cggtagtaac tttgtgttat gaatcacatg aaagcatgga atcttatgaa cttaatccct 120
 tcattaacag gagaaatgca aataccttca tateccctca gcagagatgg agagctaaaag 180
 tccaagagag gatccgagaa cgctctaagc ctgtccacga gctcaatagg gaagcctgtg 240
 atgactacag actttgcgaa cgctacgcca tggtttatgg atacaatgct gcctataatc 300
 gctacttcag gaagcgccga gggaccaaat gagactgagg gaagaaaaaa a 351

<210> 321
 <211> 421
 <212> DNA
 <213> Homo sapien

<400> 321
 ctggaggcgg ttcagctgct tcaagatgaa gctgaacatc tccttcccag ccactggctg 60
 ccagaaactc attgaagtgg acgatgaacg caaacttcgt actttctatg agaagcgtat 120
 ggccacagaa gttgctgctg acgctctggg tgaagaatgg aagggttatg tggtcggaat 180
 cagtgggtggg aacgacaaac aagggttccc catgaagcag ggtgtcttga cccatggccg 240
 tgtccgcctg ctactgagta aggggcattc ctgttacaga ccaaggagaa ctggagaaaag 300
 aaagagaaaa tcagttcgtg gttgcattgt ggatgcaaat ctgagcgttc tcaacttgggt 360

tattgtaaaa aaaggagaga aggatattcc tggactgact gatactacag tgcctcgccg 420
c 421

<210> 322
<211> 521
<212> DNA
<213> Homo sapien

<400> 322
agcagctctc ctgccacagc tcctcacccc ctgaaaatgt tcgcctgctc caagtttgtc 60
tccactccct ccttggtcaa gagcacctca cagctgctga gccgtccgct atctgcagtg 120
gtgctgaaac gaccggagat actgacagat gagagcctca gcagcttggc agtctcatgt 180
ccccttacct cacttgtctc tagccgcagc ttccaaacca gcgccatttc aaggacatc 240
gacacagcag ccaagttcat tggagctggg gctgccacag ttgggggtggc tggttctggg 300
gctgggattg gaactgtgtt tgggagcctc atcattgggt atgccaggaa cccttctctg 360
aagcaacagc tcttctccta cgccattctg ggctttgccc tctcgaggc catggggctc 420
ttttgtctga tggtagcctt tctcactctc tttgccatgt gaaggagccg tctccacctc 480
ccatagtctt ccgcgctctg gttggccccg tgtgttcctt t 521

<210> 323
<211> 435
<212> DNA
<213> Homo sapien

<400> 323
ccgaggtcgc acgcgtgaga cttctccgcc gcagacgccg ccgcgatgcg ctacgtcgcc 60
tcctacctgc tggctgccct agggggcaac tcctcccca gcgccaagga catcaagaag 120
atcttggaac gcgtgggtat cgaggcggac gacgaccggc tcaacaaggt tatcagtga 180
ctgaatggaa aaaacattga agacgtcatt gccagggtta ttggcaagct tgccagtga 240
cctgctgggt gggctgtagc cgtctctgct gccccaggct ctgcagcccc tgctgctggt 300
tctgccccct ctgcagcaga ggagaagaaa gatgagaaga aggaggagtc tgaagagtca 360
gatgatgaca tgggatttgg cttttttgat taaattcctg ctccccctgca aataaagcct 420
ttttacacat ctcaa 435

<210> 324
<211> 521
<212> DNA
<213> Homo sapien

<400> 324
aggagatcga ctttcggtgc ccgcaagacc agggctggaa cgccgagatc acgctgcaga 60
tgggtgcagta caagaatcgt caggccatcc tggcgggtcaa atccacgcgg cagaagcagc 120
agcacctggt ccagcagcag cccccctcgc agccgcagcc gcagccgcag ctccagcccc 180
aaccacagcc tcagcctcag ccgcaacccc agccccaatc acaaccccag cctcagcccc 240
aaccacagcc tcagccccag cagctccacc cgtatccgca tccacatcca catccacact 300
ctcactctca ctgcaccca caccctcacc cgcacccgca tccgcaccaa ataccgcacc 360
cacacccaca gccgcactcg cagccgcacg ggcacccggt tctccgcagc acctccaact 420
ctgcctgaaa ggggcagctc ccgggcaaga caaggttttg aggacttgag gaagtgggac 480
gagcacattt ctattgtctt cacttgatc aaaagcaaaa c 521

<210> 325
<211> 451
<212> DNA
<213> Homo sapien

<400> 325
 atttttcattt ccattaacct ggaagctttc atgaatattc tcttctttta aaacatttta 60
 acattattta aacagaaaaa gatgggctct ttctgggttag ttgttacatg atagcagaga 120
 tatttttact tagattactt tgggaatgag agattgttgt cttgaactct ggactgtac 180
 agtgaatgtg tctgtagtgtg tgtagtttg cattaaagcat gtataacatt caagtatgtc 240
 atccaaataa gaggcataata cattgaattg tttttaatcc tctgacaagt tgactcttcg 300
 acccccaccc ccaccaaga cattttaata gtaaataagag agagagagaa gagttaatga 360
 acatgaggta gtgttccact ggcaggatga cttttcaata gctcaaatca atttcagtgc 420
 ctttatcact tgaattatta acttaatttg a 451

<210> 326
 <211> 421
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> (1)...(421)
 <223> n = A,T,C or G

<400> 326
 cgcggtcgtg agggctgagg atttttggtc cgcacgctcc tgctcctgac tcaccgctgt 60
 tcgctctcgc cgaggaacaa gtcggtcagg aagcccgcgc gcaacagcca tggcttttaa 120
 ggataccgga aaaacacccg tggagccgga ggtggcaatt caccgaattc gaatcaccct 180
 aacaagccgc aacgtaaaat ccttggaata ggtgtgtgct gacttgataa gaggcgcaaa 240
 agaaaagaat ctcaaagtga aaggaccagt tcgaatgcct accaagactt tgagantcac 300
 tacaagaaaa actccttggt gtgaagggtc taagacgtgg gatcgtttcc agatgagaat 360
 tcacaagcga ctcatgtact tgcacagtcc ttctgagatt gtaagcaga ttacttccat 420
 c 421

<210> 327
 <211> 456
 <212> DNA
 <213> Homo sapien

<400> 327
 atcttgacga ggctgcggtg tctgctgcta ttctccgagc ttcgcaatgc cgctaagga 60
 cgacaagaag aagaaggacg ctggaaaagtc ggccaagaaa gacaaagacc cagtgaacaa 120
 atccgggggc aaggccaaaa agaagaagtg gtccaaaggc aaagttcggg acaagctcaa 180
 taacttagtc ttgtttgaca aagctaccta tgataaactc tgtaaggaag ttcccaacta 240
 taaacttata accccagctg tggctctctga gagactgaag attcgaggct ccttggccag 300
 ggcagccctt caggagctcc ttagtaaaagg acttatcaaa ctggtttcaa agcacagagc 360
 tcaagtaatt tacaccagaa ataccaaggg tggagatgct ccagctgctg gtgaagatgc 420
 atgaataggt ccaaccagct gtacatttgg aaaaat 456

<210> 328
 <211> 471
 <212> DNA
 <213> Homo sapien

<400> 328
 gtggaagtga catcgtcttt aaaccctgcy tggcaatccc tgacgcaccg ccgtgatgcc 60
 caggaagac agggcgacct ggaagtccaa ctacttcctt aagatcatcc aactattgga 120

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tgattatccg aaatgtttca ttgtgggagc agacaatgtg ggctccaagc agatgcagca 180
gatccgcattg tcccttcgcg ggaaggctgt ggtgctgatg ggcaagaaca ccatgatgcg 240
caaggccatc cgagggcacc tggaaaacaa cccagctctg gagaaactgc tgcctcatat 300
ccgggggaat gtgggctttg tgttcaccaa ggaggacctc actgagatca gggacatgtt 360
gctggccaat aaggtgccag ctgctgcccg tgcgtggtgcc attgccccat gtgaagtcac 420
tgtgccagcc cagaacactg gtctcgggcc cgagaagacc tcctttttcc a 471

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```

<210> 329
<211> 278
<212> DNA
<213> Homo sapien

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<220>
<221> misc_feature
<222> (1)...(278)
<223> n = A,T,C or G

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```

<400> 329
gtttaaactt aagcttggtg ccgagctcgg atccactagt ccagtgtggt ggaattctag 60
aaattgagat gcccccccag gccagcaaat gttccttttt gttcaaagtc tatttttatt 120
ccttgatatt tttctttttt tttttttttt ttngggatgg ggacttgtga atttttctaa 180
aggtgctatt taacatggga gganagcgtg tgcggctcca gccagcccg ctgctcactt 240
tccacctctt ctccacctgc ctctggcttc tcaggcct 278

```

```

<210> 330
<211> 338
<212> DNA
<213> Homo sapien

```

```

<400> 330
ctcaggcttc aacatcgaat acgccgcagg ccccttcgcc ctattcttca tagccgaata 60
cacaacattt attataataa acaccctcac cactacaatc ttcctaggaa caacatatga 120
cgcactctcc cctgaactct acacaacata tttgtcacc aagaccctac ttctaacctc 180
cctgttctta tgaattcgaa cagcatacc cggattccgc tacgaccaac tcataacct 240
cctatgaaaa aacttcctac cactaccct agcattactt atatgatatg tctccatacc 300
cattacaatc tccagcattc cccctcaaac ctaaaaaa 338

```

```

<210> 331
<211> 2820
<212> DNA
<213> Homo sapiens

```

```

<400> 331
tggcaaaatc ctggagccag aagaaaggac agcagcattg atcaatctta cagctaacat 60
gttgtagctg gaaaacaatg cccagactca atttagtgag ccacagtaca cgaacctggg 120
gctcctgaac agcatggacc agcagattcg gaacggctcc tcgtccacca gtccctataa 180
cacagaccac gcgcagaaca gcgtcacggc gccctcgccc tacgcacagc ccagccccac 240
cttcgatgct ctctctccat caccgcccac cccctccaac accgactacc caggccccga 300
cagttccgac gtgtccttcc agcagtcgag caccgccaag tcggccacct ggacgtattc 360
cactgaactg aagaaactct actgccaaat tgcaaagaca tgccccatcc agatcaaggt 420
gatgacccca cctcctcagg gagctgttat tcgcgccatg cctgtctaca aaaaagctga 480
gcacgtcacg gaggtggtga agcgggtgcc caaccatgag ctgagccgtg agttcaacga 540
gggacagatt gccctccta gtcatttgat tcgagtagag gggaacagcc atgccagta 600

```

```

tgtagaagat cccatcacag gaagacagag tgtgctggta ccttatgagc caccgccaggt 660
tggcactgaa ttcacgacag tcttgtacaa tttcatgtgt aacagcagtt gtgttggagg 720
gatgaaccgc cgtccaattt taatcattgt tactctggaa accagagatg ggcaagtcct 780
gggccgacgc tgctttgagg cccgatctg tgcttgccca ggaagagaca ggaaggcgga 840
tgaagatagc atcagaaagc agcaagtttc ggacagtaca aagaacggtg atggtacgaa 900
gcgcccgttt cgtcagaaca cacatggtat ccagatgaca tccatcaaga aacgaagatc 960
cccagatgat gaactgttat acttaccagt gaggggccgt gagacttatg aaatgctgtt 1020
gaagatcaaa gagtccctgg aactcatgca gtaccttcct cagcacacaa ttgaaacgta 1080
caggcaacag caacagcagc agcaccagca cttacttcag aaacagacct caatacagtc 1140
tccatcttca tatggtaaca gctccccacc tctgaacaaa atgaacagca tgaacaagct 1200
gccttctgtg agccagctta tcaaccctca gcagcgcaac gccctcactc ctacaaccat 1260
tctgatggc atgggagcca acattcccat gatgggcacc cacatgccaa tggctggaga 1320
catgaatgga ctacgcccc cccaggcact cctccccca ctctccatgc catccacctc 1380
ccactgcaca cccccacctc cgtatcccac agattgcagc attgtcagtt tcttagcgag 1440
gttgggctgt tcatcatgtc tggactattt cagcaccagc gggctgacca ccatctatca 1500
gattgagcat tactccatgg atgatctggc aagtctgaaa atccctgagc aatttcgaca 1560
tgcatctgg aaggcatcc tggaccaccg gcagctccac gaattctcct ccccttctca 1620
tctcctgcgg accccaagca gtgcctctac agtcagtgtg ggctccagtg agaccggggg 1680
tgagcgtgtt attgatgctg tgcgattcac cctccgcagc accatctctt tcccaccccg 1740
agatgagtgg aatgacttca actttgacat ggatgctcgc cgcaataagc aacagcgcat 1800
caaagaggag ggggagttag cctcaccatg tgagctcttc ctatccctct cctaactgcc 1860
agccccctaa aagcactcct gcttaattct caaagccttc tccctagctc ctccccttcc 1920
tcttgtctga tttcttaggg gaaggagaag taagaggcta cctcttacct aacatctgac 1980
ctggcatcta attctgattc tggctttaag ccttcaaaac tatagcttgc agaactgtag 2040
ctgccatggc taggtagaag tgagcaaaaa agagttgggt gtctccttaa gctgcagaga 2100
tttctcattg acttttataa agcatgttca ccttatagt ctaagactat atatataaat 2160
gtataaatat acagtataga tttttgggtg gggggcattg agtattgttt aaaatgtaat 2220
ttaaatgaaa gaaaattgag ttgcacttat tgaccatttt ttaatttact tgttttggat 2280
ggcttgtcta tactccttcc cttaaggggt atcatgtatg gtgataggta tctagagctt 2340
aatgctacat gtgagtgcga tgatgtacag attctttcag ttctttggat tctaaataca 2400
tgccacatca aacctttgag tagatccatt tccattgctt attatgtagg taagactgta 2460
gatatgtatt cttttctcag tgttgggtata ttttatatta ctgacatttc ttctagtgat 2520
gatggttcac gttggggtga ttaaatccag ttataagaag aagttcatgt ccaaaccggtc 2580
ctcttttagtt tttgggtggg aatgaggaaa attcttaaaa ggcccatagc agccagttca 2640
aaaacaccgc acgtcatgta tttgagcata tcagtaaccc ccttaaatat aatacccaga 2700
taccttatct tacaatgttg attgggaaaa catttgctgc ccattacaga ggtattaaaa 2760
ctaaatttca ctactagatt gactaactca aatacacatt tgctactgtt gtaagaattc 2820

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<210> 332
<211> 2270
<212> DNA
<213> Homo sapiens

```

```

<400> 332
tcgttgatat caaagacagt tgaaggaaat gaattttgaa acttcacggt gtgccaccct 60
acagtactgc cctgaccctt acatccagcg tttcgtagaa acccagctca tttctcttgg 120
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 <212> DNA
 <213> Homo sapiens

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<213> Homo sapiens

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 <211> 1386
 <212> DNA
 <213> Homo sapiens

<400> 336

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tctccatcac ccgccatccc ctccaacacc gactaccag gcccgcacag ttctgacgtg 420
tccttccagc agtcgagcac cgccaagtcg gccacctgga cgtattccac tgaactgaag 480
aaactctact gccaaattgc aaagacatgc cccatccaga tcaaggtgat gacccacct 540
cctcagggag ctgttatccg cgccatgcct gtctacaaaa aagctgagca cgtcacggag 600
gtggtgaagc ggtgccccaa ccatgagctg agccgtgaat tcaacgaggg acagattgcc 660
cctcctagtc atttgattcg agtagagggt aacagccatg cccagtatgt agaagatccc 720
atcacaggaa gacagagtg gctggtagct tatgagccac cccaggttgg cactgaattc 780
acgacagtct tgtacaattt catgtgtaac agcagttgtg ttggagggat gaaccgccgt 840

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<210> 338
<211> 586
<212> PRT
<213> Homo sapiens
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Met Leu Tyr Leu Glu Asn Asn Ala Gln Thr Gln Phe Ser Glu Pro Gln
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Gly Ser Ser Ser Thr Ser Pro Tyr Asn Thr Asp His Ala Gln Asn Ser
35 40 45

Leu Ser Pro Ser Pro Ala Ile Pro Ser Asn Thr Asp Tyr Pro Gly Pro
65 70 75 80

Thr Trp Thr Tyr Ser Thr Glu Leu Lys Lys Leu Tyr Cys Gln Ile Ala
100 105 110

Ala Val Ile Arg Ala Met Pro Val Tyr Lys Lys Ala Glu His Val Thr
130 135 140

Glu Gly Gln Ile Ala Pro Pro Ser His Leu Ile Arg Val Glu Gly Asn
165 170 175

Ser His Ala Gln Tyr Val Glu Asp Pro Ile Thr Gly Arg Gln Ser Val
 180 185 190

Leu Val Pro Tyr Glu Pro Pro Gln Val Gly Thr Glu Phe Thr Thr Val
 195 200 205
 Leu Tyr Asn Phe Met Cys Asn Ser Ser Cys Val Gly Gly Met Asn Arg
 210 215 220
 Arg Pro Ile Leu Ile Ile Val Thr Leu Glu Thr Arg Asp Gly Gln Val
 225 230 235 240
 Leu Gly Arg Arg Cys Phe Glu Ala Arg Ile Cys Ala Cys Pro Gly Arg
 245 250 255
 Asp Arg Lys Ala Asp Glu Asp Ser Ile Arg Lys Gln Gln Val Ser Asp
 260 265 270
 Ser Thr Lys Asn Gly Asp Gly Thr Lys Arg Pro Phe Arg Gln Asn Thr
 275 280 285
 His Gly Ile Gln Met Thr Ser Ile Lys Lys Arg Arg Ser Pro Asp Asp
 290 295 300
 Glu Leu Leu Tyr Leu Pro Val Arg Gly Arg Glu Thr Tyr Glu Met Leu
 305 310 315 320
 Leu Lys Ile Lys Glu Ser Leu Glu Leu Met Gln Tyr Leu Pro Gln His
 325 330 335
 Thr Ile Glu Thr Tyr Arg Gln Gln Gln Gln Gln His Gln His Leu
 340 345 350
 Leu Gln Lys Gln Thr Ser Ile Gln Ser Pro Ser Ser Tyr Gly Asn Ser
 355 360 365
 Ser Pro Pro Leu Asn Lys Met Asn Ser Met Asn Lys Leu Pro Ser Val
 370 375 380
 Ser Gln Leu Ile Asn Pro Gln Gln Arg Asn Ala Leu Thr Pro Thr Thr
 385 390 395 400
 Ile Pro Asp Gly Met Gly Ala Asn Ile Pro Met Met Gly Thr His Met
 405 410 415
 Pro Met Ala Gly Asp Met Asn Gly Leu Ser Pro Thr Gln Ala Leu Pro
 420 425 430
 Pro Pro Leu Ser Met Pro Ser Thr Ser His Cys Thr Pro Pro Pro Pro
 435 440 445
 Tyr Pro Thr Asp Cys Ser Ile Val Ser Phe Leu Ala Arg Leu Gly Cys
 450 455 460
 Ser Ser Cys Leu Asp Tyr Phe Thr Thr Gln Gly Leu Thr Thr Ile Tyr
 465 470 475 480

Asn Thr Asp Tyr Pro Gly Pro His Ser Phe Asp Val Ser Phe Gln Gln
130 135 140

Ser Ser Thr Ala Lys Ser Ala Thr Trp Thr Tyr Ser Thr Glu Leu Lys
 145 150 155 160
 Lys Leu Tyr Cys Gln Ile Ala Lys Thr Cys Pro Ile Gln Ile Lys Val
 165 170 175
 Met Thr Pro Pro Pro Gln Gly Ala Val Ile Arg Ala Met Pro Val Tyr
 180 185 190
 Lys Lys Ala Glu His Val Thr Glu Val Val Lys Arg Cys Pro Asn His
 195 200 205
 Glu Leu Ser Arg Glu Phe Asn Glu Gly Gln Ile Ala Pro Pro Ser His
 210 215 220
 Leu Ile Arg Val Glu Gly Asn Ser His Ala Gln Tyr Val Glu Asp Pro
 225 230 235 240
 Ile Thr Gly Arg Gln Ser Val Leu Val Pro Tyr Glu Pro Pro Gln Val
 245 250 255
 Gly Thr Glu Phe Thr Thr Val Leu Tyr Asn Phe Met Cys Asn Ser Ser
 260 265 270
 Cys Val Gly Gly Met Asn Arg Arg Pro Ile Leu Ile Ile Val Thr Leu
 275 280 285
 Glu Thr Arg Asp Gly Gln Val Leu Gly Arg Arg Cys Phe Glu Ala Arg
 290 295 300
 Ile Cys Ala Cys Pro Gly Arg Asp Arg Lys Ala Asp Glu Asp Ser Ile
 305 310 315 320
 Arg Lys Gln Gln Val Ser Asp Ser Thr Lys Asn Gly Asp Gly Thr Lys
 325 330 335
 Arg Pro Phe Arg Gln Asn Thr His Gly Ile Gln Met Thr Ser Ile Lys
 340 345 350
 Lys Arg Arg Ser Pro Asp Asp Glu Leu Leu Tyr Leu Pro Val Arg Gly
 355 360 365
 Arg Glu Thr Tyr Glu Met Leu Leu Lys Ile Lys Glu Ser Leu Glu Leu
 370 375 380
 Met Gln Tyr Leu Pro Gln His Thr Ile Glu Thr Tyr Arg Gln Gln Gln
 385 390 395 400
 Gln Gln Gln His Gln His Leu Leu Gln Lys Gln Thr Ser Ile Gln Ser
 405 410 415
 Pro Ser Ser Tyr Gly Asn Ser Ser Pro Pro Leu Asn Lys Met Asn Ser
 420 425 430

Met Asn Lys Leu Pro Ser Val Ser Gln Leu Ile Asn Pro Gln Gln Arg
 435 440 445
 Asn Ala Leu Thr Pro Thr Thr Ile Pro Asp Gly Met Gly Ala Asn Ile
 450 455 460
 Pro Met Met Gly Thr His Met Pro Met Ala Gly Asp Met Asn Gly Leu
 465 470 475 480
 Ser Pro Thr Gln Ala Leu Pro Pro Pro Leu Ser Met Pro Ser Thr Ser
 485 490 495
 His Cys Thr Pro Pro Pro Tyr Pro Thr Asp Cys Ser Ile Val Gly
 500 505 510
 Phe Leu Ala Arg Leu Gly Cys Ser Ser Cys Leu Asp Tyr Phe Thr Thr
 515 520 525
 Gln Gly Leu Thr Thr Ile Tyr Gln Ile Glu His Tyr Ser Met Asp Asp
 530 535 540
 Leu Ala Ser Leu Lys Ile Pro Glu Gln Phe Arg His Ala Ile Trp Lys
 545 550 555 560
 Gly Ile Leu Asp His Arg Gln Leu His Glu Phe Ser Ser Pro Ser His
 565 570 575
 Leu Leu Arg Thr Pro Ser Ser Ala Ser Thr Val Ser Val Gly Ser Ser
 580 585 590
 Glu Thr Arg Gly Glu Arg Val Ile Asp Ala Val Arg Phe Thr Leu Arg
 595 600 605
 Gln Thr Ile Ser Phe Pro Pro Arg Asp Glu Trp Asn Asp Phe Asn Phe
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 Asp Met Asp Ala Arg Arg Asn Lys Gln Gln Arg Ile Lys Glu Glu Gly
 625 630 635 640
 Glu

<210> 340
 <211> 448
 <212> PRT
 <213> Homo sapiens

<400> 340
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 Gln His Ile Trp Asp Phe Leu Glu Gln Pro Ile Cys Ser Val Gln Pro
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Ile Asp Leu Asn Phe Val Asp Glu Pro Ser Glu Asp Gly Ala Thr Asn
 35 40 45
 Lys Ile Glu Ile Ser Met Asp Cys Ile Arg Met Gln Asp Ser Asp Leu
 50 55 60
 Ser Asp Pro Met Trp Pro Gln Tyr Thr Asn Leu Gly Leu Leu Asn Ser
 65 70 75 80
 Met Asp Gln Gln Ile Gln Asn Gly Ser Ser Ser Thr Ser Pro Tyr Asn
 85 90 95
 Thr Asp His Ala Gln Asn Ser Val Thr Ala Pro Ser Pro Tyr Ala Gln
 100 105 110
 Pro Ser Ser Thr Phe Asp Ala Leu Ser Pro Ser Pro Ala Ile Pro Ser
 115 120 125
 Asn Thr Asp Tyr Pro Gly Pro His Ser Phe Asp Val Ser Phe Gln Gln
 130 135 140
 Ser Ser Thr Ala Lys Ser Ala Thr Trp Thr Tyr Ser Thr Glu Leu Lys
 145 150 155 160
 Lys Leu Tyr Cys Gln Ile Ala Lys Thr Cys Pro Ile Gln Ile Lys Val
 165 170 175
 Met Thr Pro Pro Pro Gln Gly Ala Val Ile Arg Ala Met Pro Val Tyr
 180 185 190
 Lys Lys Ala Glu His Val Thr Glu Val Val Lys Arg Cys Pro Asn His
 195 200 205
 Glu Leu Ser Arg Glu Phe Asn Glu Gly Gln Ile Ala Pro Pro Ser His
 210 215 220
 Leu Ile Arg Val Glu Gly Asn Ser His Ala Gln Tyr Val Glu Asp Pro
 225 230 235 240
 Ile Thr Gly Arg Gln Ser Val Leu Val Pro Tyr Glu Pro Pro Gln Val
 245 250 255
 Gly Thr Glu Phe Thr Thr Val Leu Tyr Asn Phe Met Cys Asn Ser Ser
 260 265 270
 Cys Val Gly Gly Met Asn Arg Arg Pro Ile Leu Ile Ile Val Thr Leu
 275 280 285
 Glu Thr Arg Asp Gly Gln Val Leu Gly Arg Arg Cys Phe Glu Ala Arg
 290 295 300
 Ile Cys Ala Cys Pro Gly Arg Asp Arg Lys Ala Asp Glu Asp Ser Ile
 305 310 315 320

Arg Lys Gln Gln Val Ser Asp Ser Thr Lys Asn Gly Asp Gly Thr Lys
325 330 335

Arg Pro Phe Arg Gln Asn Thr His Gly Ile Gln Met Thr Ser Ile Lys
340 345 350

Lys Arg Arg Ser Pro Asp Asp Glu Leu Leu Tyr Leu Pro Val Arg Gly
355 360 365

Arg Glu Thr Tyr Glu Met Leu Leu Lys Ile Lys Glu Ser Leu Glu Leu
370 375 380

Met Gln Tyr Leu Pro Gln His Thr Ile Glu Thr Tyr Arg Gln Gln Gln
385 390 395 400

Gln Gln Gln His Gln His Leu Leu Gln Lys His Leu Leu Ser Ala Cys
405 410 415

Phe Arg Asn Glu Leu Val Glu Pro Arg Arg Glu Thr Pro Lys Gln Ser
420 425 430

Asp Val Phe Phe Arg His Ser Lys Pro Pro Asn Arg Ser Val Tyr Pro
435 440 445

<210> 341

<211> 356

<212> PRT

<213> Homo sapiens

<400> 341

Met Leu Tyr Leu Glu Asn Asn Ala Gln Thr Gln Phe Ser Glu Pro Gln
5 10 15

Tyr Thr Asn Leu Gly Leu Leu Asn Ser Met Asp Gln Gln Ile Gln Asn
20 25 30

Gly Ser Ser Ser Thr Ser Pro Tyr Asn Thr Asp His Ala Gln Asn Ser
35 40 45

Val Thr Ala Pro Ser Pro Tyr Ala Gln Pro Ser Ser Thr Phe Asp Ala
50 55 60

Leu Ser Pro Ser Pro Ala Ile Pro Ser Asn Thr Asp Tyr Pro Gly Pro
65 70 75 80

His Ser Phe Asp Val Ser Phe Gln Gln Ser Ser Thr Ala Lys Ser Ala
85 90 95

Thr Trp Thr Tyr Ser Thr Glu Leu Lys Lys Leu Tyr Cys Gln Ile Ala
100 105 110

Lys Thr Cys Pro Ile Gln Ile Lys Val Met Thr Pro Pro Pro Gln Gly
115 120 125

Ala Val Ile Arg Ala Met Pro Val Tyr Lys Lys Ala Glu His Val Thr
 130 135 140
 Glu Val Val Lys Arg Cys Pro Asn His Glu Leu Ser Arg Glu Phe Asn
 145 150 155 160
 Glu Gly Gln Ile Ala Pro Pro Ser His Leu Ile Arg Val Glu Gly Asn
 165 170 175
 Ser His Ala Gln Tyr Val Glu Asp Pro Ile Thr Gly Arg Gln Ser Val
 180 185 190
 Leu Val Pro Tyr Glu Pro Pro Gln Val Gly Thr Glu Phe Thr Thr Val
 195 200 205
 Leu Tyr Asn Phe Met Cys Asn Ser Ser Cys Val Gly Gly Met Asn Arg
 210 215 220
 Arg Pro Ile Leu Ile Ile Val Thr Leu Glu Thr Arg Asp Gly Gln Val
 225 230 235 240
 Leu Gly Arg Arg Cys Phe Glu Ala Arg Ile Cys Ala Cys Pro Gly Arg
 245 250 255
 Asp Arg Lys Ala Asp Glu Asp Ser Ile Arg Lys Gln Gln Val Ser Asp
 260 265 270
 Ser Thr Lys Asn Gly Asp Gly Thr Lys Arg Pro Ser Arg Gln Asn Thr
 275 280 285
 His Gly Ile Gln Met Thr Ser Ile Lys Lys Arg Arg Ser Pro Asp Asp
 290 295 300
 Glu Leu Leu Tyr Leu Pro Val Arg Gly Arg Glu Thr Tyr Glu Met Leu
 305 310 315 320
 Leu Lys Ile Lys Glu Ser Leu Glu Leu Met Gln Tyr Leu Pro Gln His
 325 330 335
 Thr Ile Glu Thr Tyr Arg Gln Gln Gln Gln Gln His Gln His Leu
 340 345 350
 Leu Gln Lys Gln
 355
 <210> 342
 <211> 680
 <212> PRT
 <213> Homo sapiens
 <400> 342
 Met Asn Phe Glu Thr Ser Arg Cys Ala Thr Leu Gln Tyr Cys Pro Asp
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Pro Tyr Ile Gln Arg Phe Val Glu Thr Pro Ala His Phe Ser Trp Lys
 20 25 30
 Glu Ser Tyr Tyr Arg Ser Thr Met Ser Gln Ser Thr Gln Thr Asn Glu
 35 40 45
 Phe Leu Ser Pro Glu Val Phe Gln His Ile Trp Asp Phe Leu Glu Gln
 50 55 60
 Pro Ile Cys Ser Val Gln Pro Ile Asp Leu Asn Phe Val Asp Glu Pro
 65 70 75 80
 Ser Glu Asp Gly Ala Thr Asn Lys Ile Glu Ile Ser Met Asp Cys Ile
 85 90 95
 Arg Met Gln Asp Ser Asp Leu Ser Asp Pro Met Trp Pro Gln Tyr Thr
 100 105 110
 Asn Leu Gly Leu Leu Asn Ser Met Asp Gln Gln Ile Gln Asn Gly Ser
 115 120 125
 Ser Ser Thr Ser Pro Tyr Asn Thr Asp His Ala Gln Asn Ser Val Thr
 130 135 140
 Ala Pro Ser Pro Tyr Ala Gln Pro Ser Ser Thr Phe Asp Ala Leu Ser
 145 150 155 160
 Pro Ser Pro Ala Ile Pro Ser Asn Thr Asp Tyr Pro Gly Pro His Ser
 165 170 175
 Phe Asp Val Ser Phe Gln Gln Ser Ser Thr Ala Lys Ser Ala Thr Trp
 180 185 190
 Thr Tyr Ser Thr Glu Leu Lys Lys Leu Tyr Cys Gln Ile Ala Lys Thr
 195 200 205
 Cys Pro Ile Gln Ile Lys Val Met Thr Pro Pro Pro Gln Gly Ala Val
 210 215 220
 Ile Arg Ala Met Pro Val Tyr Lys Lys Ala Glu His Val Thr Glu Val
 225 230 235 240
 Val Lys Arg Cys Pro Asn His Glu Leu Ser Arg Glu Phe Asn Glu Gly
 245 250 255
 Gln Ile Ala Pro Pro Ser His Leu Ile Arg Val Glu Gly Asn Ser His
 260 265 270
 Ala Gln Tyr Val Glu Asp Pro Ile Thr Gly Arg Gln Ser Val Leu Val
 275 280 285
 Pro Tyr Glu Pro Pro Gln Val Gly Thr Glu Phe Thr Thr Val Leu Tyr
 290 295 300

Asn Phe Met Cys Asn Ser Ser Cys Val Gly Gly Met Asn Arg Arg Pro
 305 310 315 320
 Ile Leu Ile Ile Val Thr Leu Glu Thr Arg Asp Gly Gln Val Leu Gly
 325 330 335
 Arg Arg Cys Phe Glu Ala Arg Ile Cys Ala Cys Pro Gly Arg Asp Arg
 340 345 350
 Lys Ala Asp Glu Asp Ser Ile Arg Lys Gln Gln Val Ser Asp Ser Thr
 355 360 365
 Lys Asn Gly Asp Gly Thr Lys Arg Pro Phe Arg Gln Asn Thr His Gly
 370 375 380
 Ile Gln Met Thr Ser Ile Lys Lys Arg Arg Ser Pro Asp Asp Glu Leu
 385 390 395 400
 Leu Tyr Leu Pro Val Arg Gly Arg Glu Thr Tyr Glu Met Leu Leu Lys
 405 410 415
 Ile Lys Glu Ser Leu Glu Leu Met Gln Tyr Leu Pro Gln His Thr Ile
 420 425 430
 Glu Thr Tyr Arg Gln Gln Gln Gln Gln His Gln His Leu Leu Gln
 435 440 445
 Lys Gln Thr Ser Ile Gln Ser Pro Ser Ser Tyr Gly Asn Ser Ser Pro
 450 455 460
 Pro Leu Asn Lys Met Asn Ser Met Asn Lys Leu Pro Ser Val Ser Gln
 465 470 475 480
 Leu Ile Asn Pro Gln Gln Arg Asn Ala Leu Thr Pro Thr Thr Ile Pro
 485 490 495
 Asp Gly Met Gly Ala Asn Ile Pro Met Met Gly Thr His Met Pro Met
 500 505 510
 Ala Gly Asp Met Asn Gly Leu Ser Pro Thr Gln Ala Leu Pro Pro Pro
 515 520 525
 Leu Ser Met Pro Ser Thr Ser Gln Cys Thr Pro Pro Pro Tyr Pro
 530 535 540
 Thr Asp Cys Ser Ile Val Ser Phe Leu Ala Arg Leu Gly Cys Ser Ser
 545 550 555 560
 Cys Leu Asp Tyr Phe Thr Thr Gln Gly Leu Thr Thr Ile Tyr Gln Ile
 565 570 575
 Glu His Tyr Ser Met Asp Asp Leu Ala Ser Leu Lys Ile Pro Glu Gln
 580 585 590

Phe Arg His Ala Ile Trp Lys Gly Ile Leu Asp His Arg Gln Leu His
 595 600 605
 Glu Phe Ser Ser Pro Ser His Leu Leu Arg Thr Pro Ser Ser Ala Ser
 610 615 620
 Thr Val Ser Val Gly Ser Ser Glu Thr Arg Gly Glu Arg Val Ile Asp
 625 630 635 640
 Ala Val Arg Phe Thr Leu Arg Gln Thr Ile Ser Phe Pro Pro Arg Asp
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 Gln Arg Ile Lys Glu Glu Gly Glu
 675 680
 <210> 343
 <211> 461
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 <213> Homo sapiens
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 Met Leu Tyr Leu Glu Asn Asn Ala Gln Thr Gln Phe Ser Glu Pro Gln
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 Tyr Thr Asn Leu Gly Leu Leu Asn Ser Met Asp Gln Gln Ile Gln Asn
 20 25 30
 Gly Ser Ser Ser Thr Ser Pro Tyr Asn Thr Asp His Ala Gln Asn Ser
 35 40 45
 Val Thr Ala Pro Ser Pro Tyr Ala Gln Pro Ser Ser Thr Phe Asp Ala
 50 55 60
 Leu Ser Pro Ser Pro Ala Ile Pro Ser Asn Thr Asp Tyr Pro Gly Pro
 65 70 75 80
 His Ser Phe Asp Val Ser Phe Gln Gln Ser Ser Thr Ala Lys Ser Ala
 85 90 95
 Thr Trp Thr Tyr Ser Thr Glu Leu Lys Lys Leu Tyr Cys Gln Ile Ala
 100 105 110
 Lys Thr Cys Pro Ile Gln Ile Lys Val Met Thr Pro Pro Pro Gln Gly
 115 120 125
 Ala Val Ile Arg Ala Met Pro Val Tyr Lys Lys Ala Glu His Val Thr
 130 135 140
 Glu Val Val Lys Arg Cys Pro Asn His Glu Leu Ser Arg Glu Phe Asn
 145 150 155 160

Glu Gly Gln Ile Ala Pro Pro Ser His Leu Ile Arg Val Glu Gly Asn
 165 170 175
 Ser His Ala Gln Tyr Val Glu Asp Pro Ile Thr Gly Arg Gln Ser Val
 180 185 190
 Leu Val Pro Tyr Glu Pro Pro Gln Val Gly Thr Glu Phe Thr Thr Val
 195 200 205
 Leu Tyr Asn Phe Met Cys Asn Ser Ser Cys Val Gly Gly Met Asn Arg
 210 215 220
 Arg Pro Ile Leu Ile Ile Val Thr Leu Glu Thr Arg Asp Gly Gln Val
 225 230 235 240
 Leu Gly Arg Arg Cys Phe Glu Ala Arg Ile Cys Ala Cys Pro Gly Arg
 245 250 255
 Asp Arg Lys Ala Asp Glu Asp Ser Ile Arg Lys Gln Gln Val Ser Asp
 260 265 270
 Ser Thr Lys Asn Gly Asp Gly Thr Lys Arg Pro Phe Arg Gln Asn Thr
 275 280 285
 His Gly Ile Gln Met Thr Ser Ile Lys Lys Arg Arg Ser Pro Asp Asp
 290 295 300
 Glu Leu Leu Tyr Leu Pro Val Arg Gly Arg Glu Thr Tyr Glu Met Leu
 305 310 315 320
 Leu Lys Ile Lys Glu Ser Leu Glu Leu Met Gln Tyr Leu Pro Gln His
 325 330 335
 Thr Ile Glu Thr Tyr Arg Gln Gln Gln Gln Gln His Gln His Leu
 340 345 350
 Leu Gln Lys Gln Thr Ser Ile Gln Ser Pro Ser Ser Tyr Gly Asn Ser
 355 360 365
 Ser Pro Pro Leu Asn Lys Met Asn Ser Met Asn Lys Leu Pro Ser Val
 370 375 380
 Ser Gln Leu Ile Asn Pro Gln Gln Arg Asn Ala Leu Thr Pro Thr Thr
 385 390 395 400
 Ile Pro Asp Gly Met Gly Ala Asn Ile Pro Met Met Gly Thr His Met
 405 410 415
 Pro Met Ala Gly Asp Met Asn Gly Leu Ser Pro Thr Gln Ala Leu Pro
 420 425 430
 Pro Pro Leu Ser Met Pro Ser Thr Ser His Cys Thr Pro Pro Pro Pro
 435 440 445

Tyr Pro Thr Asp Cys Ser Ile Val Arg Ile Trp Gln Val
 450 455 460

<210> 344

<211> 516

<212> PRT

<213> Homo sapiens

<400> 344

Met Ser Gln Ser Thr Gln Thr Asn Glu Phe Leu Ser Pro Glu Val Phe
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Gln His Ile Trp Asp Phe Leu Glu Gln Pro Ile Cys Ser Val Gln Pro
 20 25 30

Ile Asp Leu Asn Phe Val Asp Glu Pro Ser Glu Asp Gly Ala Thr Asn
 35 40 45

Lys Ile Glu Ile Ser Met Asp Cys Ile Arg Met Gln Asp Ser Asp Leu
 50 55 60

Ser Asp Pro Met Trp Pro Gln Tyr Thr Asn Leu Gly Leu Leu Asn Ser
 65 70 75 80

Met Asp Gln Gln Ile Gln Asn Gly Ser Ser Ser Thr Ser Pro Tyr Asn
 85 90 95

Thr Asp His Ala Gln Asn Ser Val Thr Ala Pro Ser Pro Tyr Ala Gln
 100 105 110

Pro Ser Ser Thr Phe Asp Ala Leu Ser Pro Ser Pro Ala Ile Pro Ser
 115 120 125

Asn Thr Asp Tyr Pro Gly Pro His Ser Phe Asp Val Ser Phe Gln Gln
 130 135 140

Ser Ser Thr Ala Lys Ser Ala Thr Trp Thr Tyr Ser Thr Glu Leu Lys
 145 150 155 160

Lys Leu Tyr Cys Gln Ile Ala Lys Thr Cys Pro Ile Gln Ile Lys Val
 165 170 175

Met Thr Pro Pro Pro Gln Gly Ala Val Ile Arg Ala Met Pro Val Tyr
 180 185 190

Lys Lys Ala Glu His Val Thr Glu Val Val Lys Arg Cys Pro Asn His
 195 200 205

Glu Leu Ser Arg Glu Phe Asn Glu Gly Gln Ile Ala Pro Pro Ser His
 210 215 220

Leu Ile Arg Val Glu Gly Asn Ser His Ala Gln Tyr Val Glu Asp Pro
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 260 265 270
 Cys Val Gly Gly Met Asn Arg Arg Pro Ile Leu Ile Ile Val Thr Leu
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 Glu Thr Arg Asp Gly Gln Val Leu Gly Arg Arg Cys Phe Glu Ala Arg
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 Ile Cys Ala Cys Pro Gly Arg Asp Arg Lys Ala Asp Glu Asp Ser Ile
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 Arg Lys Gln Gln Val Ser Asp Ser Thr Lys Asn Gly Asp Gly Thr Lys
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 Arg Pro Phe Arg Gln Asn Thr His Gly Ile Gln Met Thr Ser Ile Lys
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 Lys Arg Arg Ser Pro Asp Asp Glu Leu Leu Tyr Leu Pro Val Arg Gly
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 Met Gln Tyr Leu Pro Gln His Thr Ile Glu Thr Tyr Arg Gln Gln Gln
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 Gln Gln Gln His Gln His Leu Leu Gln Lys Gln Thr Ser Ile Gln Ser
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 Pro Ser Ser Tyr Gly Asn Ser Ser Pro Pro Leu Asn Lys Met Asn Ser
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 Met Asn Lys Leu Pro Ser Val Ser Gln Leu Ile Asn Pro Gln Gln Arg
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 Pro Met Met Gly Thr His Met Pro Met Ala Gly Asp Met Asn Gly Leu
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 Tyr Asp His Phe Phe Pro Val Ser His Ile Arg Leu Trp Ala Leu Gln
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 Tyr Tyr Arg His Glu Thr Thr Arg Lys Phe Arg Arg Gly Glu Lys Arg
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 Asn Asp Phe Lys Asp Ile Glu Asp Ile Lys Lys His Lys Val Arg Ile
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 Ile Phe Glu Ala Ala Phe Met Tyr Val Phe Tyr Phe Leu Tyr Asn Gly
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 Tyr His Leu Pro Trp Val Leu Lys Cys Gly Ile Asp Pro Cys Pro Asn
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 Leu Val Asp Cys Phe Ile Ser Arg Pro Thr Glu Lys Thr Val Phe Thr
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 Glu Leu Cys Tyr Leu Leu Leu Lys Val Cys Phe Arg Arg Ser Lys Arg
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 Ala Gln Thr Gln Lys Asn His Pro Asn His Ala Leu Lys Glu Ser Lys
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Phe Leu Val Lys Thr Gly Tyr Ala Phe Val Asp Cys Pro Asp Glu Ser
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Trp Ala Leu Lys Ala Ile Glu Ala Leu Ser Gly Lys Ile Glu Leu His
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Gly Lys Pro Ile Glu Val Glu His Ser Val Pro Lys Arg Gln Arg Ile
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Arg Lys Leu Gln Ile Arg Asn Ile Pro Pro His Leu Gln Trp Glu Val
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Leu Asp Ser Leu Leu Val Gln Tyr Gly Val Val Glu Ser Cys Glu Gln

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Glu Asn Phe Thr Leu Lys Val Ala Tyr Ile Pro Asp Glu Thr Ala Ala		
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Gln Gln Asn Pro Leu Gln Gln Pro Arg Gly Arg Arg Gly Leu Gly Gln		
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Arg Gly Ser Ser Arg Gln Gly Ser Pro Gly Ser Val Ser Lys Gln Lys		
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Pro Cys Asp Leu Pro Leu Arg Leu Leu Val Pro Thr Gln Phe Val Gly		
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Glu Lys Ser Ile Thr Ile Leu Ser Thr Pro Glu Gly Thr Ser Ala Ala		
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Cys Lys Ser Ile Leu Glu Ile Met His Lys Glu Ala Gln Asp Ile Lys		
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Phe Thr Glu Glu Ile Pro Leu Lys Ile Leu Ala His Asn Asn Phe Val		
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Asp Thr Asp Thr Lys Ile Thr Ile Ser Pro Leu Gln Glu Leu Thr Leu		
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Tyr Asn Pro Glu Arg Thr Ile Thr Val Lys Gly Asn Val Glu Thr Cys		
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Ala Lys Ala Glu Glu Glu Ile Met Lys Lys Ile Arg Glu Ser Tyr Glu		
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Asn Asp Ile Ala Ser Met Asn Leu Gln Ala His Leu Ile Pro Gly Leu		
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Asn Leu Asn Ala Leu Gly Leu Phe Pro Pro Thr Ser Gly Met Pro Pro		
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 Glu Gln Ser Glu Thr Glu Thr Val His Leu Phe Ile Pro Ala Leu Ser
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 Val Gly Ala Ile Ile Gly Lys Gln Gly Gln His Ile Lys Gln Leu Ser
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 Ala Lys Val Arg Met Val Ile Ile Thr Gly Pro Pro Glu Ala Gln Phe
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 Ser Pro Lys Glu Glu Val Lys Leu Glu Ala His Ile Arg Val Pro Ser
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 Phe Ala Ala Gly Arg Val Ile Gly Lys Gly Gly Lys Thr Val Asn Glu
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 Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr
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 Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser
 100 105 110
 Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr
 115 120 125
 Leu Ala Glu Gly Pro Pro Ala Glu Phe Met Asp Trp Gly Thr Leu His
 130 135 140
 Thr Phe Ile Gly Gly Val Asn Lys His Ser Thr Ser Ile Gly Lys Val
 145 150 155 160
 Trp Ile Thr Val Ile Phe Ile Phe Arg Val Met Ile Leu Val Val Ala
 165 170 175
 Ala Gln Glu Val Trp Gly Asp Glu Gln Glu Asp Phe Val Cys Asn Thr
 180 185 190
 Leu Gln Pro Gly Cys Lys Asn Val Cys Tyr Asp His Phe Phe Pro Val
 195 200 205
 Ser His Ile Arg Leu Trp Ala Leu Gln Leu Ile Phe Val Ser Thr Pro
 210 215 220
 Ala Leu Leu Val Ala Met His Val Ala Tyr Tyr Arg His Glu Thr Thr
 225 230 235 240
 Arg Lys Phe Arg Arg Gly Glu Lys Arg Asn Asp Phe Lys Asp Ile Glu
 245 250 255
 Asp Ile Lys Lys Gln Lys Val Arg Ile Glu Gly
 260 265

<210> 353

<211> 900

<212> DNA

<213> Homo sapiens

<400> 353

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[illegible]

<213> Homo sapiens

Lys Gln Lys Val Arg Ile Glu Gly Ser Leu Trp Trp Thr Tyr Thr Ser
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Ser Ile Phe Phe Arg Ile Ile Phe Glu Ala Ala Phe Met Tyr Val Phe
 180 185 190

Tyr Phe Leu Tyr Asn Gly Tyr His Leu Pro Trp Val Leu Lys Cys Gly
 195 200 205

Ile Asp Pro Cys Pro Asn Leu Val Asp Cys Phe Ile Ser Arg Pro Thr
 210 215 220

Glu Lys Thr Val Phe Thr Ile Phe Met Ile Ser Ala Ser Val Ile Cys
 225 230 235 240

Met Leu Leu Asn Val Ala Glu Leu Cys Tyr Leu Leu Leu Lys Val Cys
 245 250 255

Phe Arg Arg Ser Lys Arg Ala Gln Thr Gln Lys Asn His Pro Asn His
 260 265 270

Ala Leu Lys Glu Ser Lys Gln Asn Glu Met Asn Glu Leu Ile Ser Asp
 275 280 285

Ser Gly Gln Asn Ala Ile Thr Gly Phe Pro Ser
 290 295

<210> 355

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 355

ggagtacagc ttcaagacaa tggg

24

<210> 356

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 356

cctatgggaat tcattataat aattttgttc c

31

<210> 357

<211> 920

<212> PRT

<213> Homo sapiens

<400> 357

Met Gln His His His His His His Gly Val Gln Leu Gln Asp Asn Gly

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 Asn Leu Ile Ser Asn Ile Lys Glu Met Ile Thr Glu Ala Ser Phe Tyr
 35 40 45
 Leu Phe Asn Ala Thr Lys Arg Arg Val Phe Phe Arg Asn Ile Lys Ile
 50 55 60
 Leu Ile Pro Ala Thr Trp Lys Ala Asn Asn Asn Ser Lys Ile Lys Gln
 65 70 75 80
 Glu Ser Tyr Glu Lys Ala Asn Val Ile Val Thr Asp Trp Tyr Gly Ala
 85 90 95
 His Gly Asp Asp Pro Tyr Thr Leu Gln Tyr Arg Gly Cys Gly Lys Glu
 100 105 110
 Gly Lys Tyr Ile His Phe Thr Pro Asn Phe Leu Leu Asn Asp Asn Leu
 115 120 125
 Thr Ala Gly Tyr Gly Ser Arg Gly Arg Val Phe Val His Glu Trp Ala
 130 135 140
 His Leu Arg Trp Gly Val Phe Asp Glu Tyr Asn Asn Asp Lys Pro Phe
 145 150 155 160
 Tyr Ile Asn Gly Gln Asn Gln Ile Lys Val Thr Arg Cys Ser Ser Asp
 165 170 175
 Ile Thr Gly Ile Phe Val Cys Glu Lys Gly Pro Cys Pro Gln Glu Asn
 180 185 190
 Cys Ile Ile Ser Lys Leu Phe Lys Glu Gly Cys Thr Phe Ile Tyr Asn
 195 200 205
 Ser Thr Gln Asn Ala Thr Ala Ser Ile Met Phe Met Gln Ser Leu Ser
 210 215 220
 Ser Val Val Glu Phe Cys Asn Ala Ser Thr His Asn Gln Glu Ala Pro
 225 230 235 240
 Asn Leu Gln Asn Gln Met Cys Ser Leu Arg Ser Ala Trp Asp Val Ile
 245 250 255
 Thr Asp Ser Ala Asp Phe His His Ser Phe Pro Met Asn Gly Thr Glu
 260 265 270
 Leu Pro Pro Pro Pro Thr Phe Ser Leu Val Glu Ala Gly Asp Lys Val
 275 280 285
 Val Cys Leu Val Leu Asp Val Ser Ser Lys Met Ala Glu Ala Asp Arg
 290 295 300
 Leu Leu Gln Leu Gln Gln Ala Ala Glu Phe Tyr Leu Met Gln Ile Val
 305 310 315 320
 Glu Ile His Thr Phe Val Gly Ile Ala Ser Phe Asp Ser Lys Gly Glu
 325 330 335
 Ile Arg Ala Gln Leu His Gln Ile Asn Ser Asn Asp Asp Arg Lys Leu
 340 345 350
 Leu Val Ser Tyr Leu Pro Thr Thr Val Ser Ala Lys Thr Asp Ile Ser
 355 360 365
 Ile Cys Ser Gly Leu Lys Lys Gly Phe Glu Val Val Glu Lys Leu Asn
 370 375 380
 Gly Lys Ala Tyr Gly Ser Val Met Ile Leu Val Thr Ser Gly Asp Asp
 385 390 395 400
 Lys Leu Leu Gly Asn Cys Leu Pro Thr Val Leu Ser Ser Gly Ser Thr
 405 410 415
 Ile His Ser Ile Ala Leu Gly Ser Ser Ala Ala Pro Asn Leu Glu Glu
 420 425 430
 Leu Ser Arg Leu Thr Gly Gly Leu Lys Phe Phe Val Pro Asp Ile Ser

435 440 445
 Asn Ser Asn Ser Met Ile Asp Ala Phe Ser Arg Ile Ser Ser Gly Thr
 450 455 460
 Gly Asp Ile Phe Gln Gln His Ile Gln Leu Glu Ser Thr Gly Glu Asn
 465 470 475 480
 Val Lys Pro His His Gln Leu Lys Asn Thr Val Thr Val Asp Asn Thr
 485 490 495
 Val Gly Asn Asp Thr Met Phe Leu Val Thr Trp Gln Ala Ser Gly Pro
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 Pro Glu Ile Ile Leu Phe Asp Pro Asp Gly Arg Lys Tyr Tyr Thr Asn
 515 520 525
 Asn Phe Ile Thr Asn Leu Thr Phe Arg Thr Ala Ser Leu Trp Ile Pro
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 Gly Thr Ala Lys Pro Gly His Trp Thr Tyr Thr Leu Asn Asn Thr His
 545 550 555 560
 His Ser Leu Gln Ala Leu Lys Val Thr Val Thr Ser Arg Ala Ser Asn
 565 570 575
 Ser Ala Val Pro Pro Ala Thr Val Glu Ala Phe Val Glu Arg Asp Ser
 580 585 590
 Leu His Phe Pro His Pro Val Met Ile Tyr Ala Asn Val Lys Gln Gly
 595 600 605
 Phe Tyr Pro Ile Leu Asn Ala Thr Val Thr Ala Thr Val Glu Pro Glu
 610 615 620
 Thr Gly Asp Pro Val Thr Leu Arg Leu Leu Asp Asp Gly Ala Gly Ala
 625 630 635 640
 Asp Val Ile Lys Asn Asp Gly Ile Tyr Ser Arg Tyr Phe Phe Ser Phe
 645 650 655
 Ala Ala Asn Gly Arg Tyr Ser Leu Lys Val His Val Asn His Ser Pro
 660 665 670
 Ser Ile Ser Thr Pro Ala His Ser Ile Pro Gly Ser His Ala Met Tyr
 675 680 685
 Val Pro Gly Tyr Thr Ala Asn Gly Asn Ile Gln Met Asn Ala Pro Arg
 690 695 700
 Lys Ser Val Gly Arg Asn Glu Glu Glu Arg Lys Trp Gly Phe Ser Arg
 705 710 715 720
 Val Ser Ser Gly Gly Ser Phe Ser Val Leu Gly Val Pro Ala Gly Pro
 725 730 735
 His Pro Asp Val Phe Pro Pro Cys Lys Ile Ile Asp Leu Glu Ala Val
 740 745 750
 Lys Val Glu Glu Glu Leu Thr Leu Ser Trp Thr Ala Pro Gly Glu Asp
 755 760 765
 Phe Asp Gln Gly Gln Ala Thr Ser Tyr Glu Ile Arg Met Ser Lys Ser
 770 775 780
 Leu Gln Asn Ile Gln Asp Phe Asn Asn Ala Ile Leu Val Asn Thr
 785 790 795 800
 Ser Lys Arg Asn Pro Gln Gln Ala Gly Ile Arg Glu Ile Phe Thr Phe
 805 810 815
 Ser Pro Gln Ile Ser Thr Asn Gly Pro Glu His Gln Pro Asn Gly Glu
 820 825 830
 Thr His Glu Ser His Arg Ile Tyr Val Ala Ile Arg Ala Met Asp Arg
 835 840 845
 Asn Ser Leu Gln Ser Ala Val Ser Asn Ile Ala Gln Ala Pro Leu Phe
 850 855 860
 Ile Pro Pro Asn Ser Asp Pro Val Pro Ala Arg Asp Tyr Leu Ile Leu

865 870 875 880
 Lys Gly Val Leu Thr Ala Met Gly Leu Ile Gly Ile Ile Cys Leu Ile
 885 890 895
 Ile Val Val Thr His His Thr Leu Ser Arg Lys Lys Arg Ala Asp Lys
 900 905 910
 Lys Glu Asn Gly Thr Lys Leu Leu
 915 920

<210> 358
 <211> 2773
 <212> DNA
 <213> Homo sapiens

<400> 358

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gaaatgataa	ctgaagcttc	attttaccta	tttaatgcta	ccaagagaag	agtatttttc	180
agaaatataa	agattttta	acctgccaca	tggaagcta	ataataacag	caaaataaaa	240
caagaatcat	atgaaaaggc	aaatgtcata	gtgactgact	ggtatggggc	acatggagat	300
gatccataca	ccctacaata	cagagggtgt	ggaaaagagg	gaaaatacat	tcatttcaca	360
cctaatttcc	tactgaatga	taacttaaca	gctggctacg	gatcacgagg	ccgagtgttt	420
gtccatgaat	gggcccacct	ccgttggggg	gtgttcgatg	agtataacaa	tgacaaacct	480
ttctacataa	atgggcaaaa	tcaaattaaa	gtgacaagg	gttcatctga	catcacaggc	540
atttttgtgt	gtgaaaaagg	tccttgcccc	caagaaaact	gtattattag	taagcttttt	600
aaagaaggat	gcacctttat	ctacaatagc	acccaaaatg	caactgcatc	aataatgttc	660
atgcaaagtt	tatcttctgt	ggttgaattt	tgtaatgcaa	gtacccacaa	ccaagaagca	720
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gcagaggctg	acagactcct	tcaactacaa	caagccgcag	aattttat	gatgcagatt	960
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<210> 359

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 359

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25

<210> 360

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 360

cgccagaatt catcaaaca atctgttagc acc

33

<210> 361

<211> 77

<212> PRT

<213> Homo sapiens

<400> 361

Met	Gln	His	His	His	His	His	His	Trp	Gln	Pro	Leu	Phe	Phe	Lys	Trp
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			20				25						30		
Thr	Gln	Pro	Glu	Asp	Asp	Ile	Asn	Thr	Gln	Arg	Lys	Lys	Ser	Gln	Glu
			35				40					45			
Lys	Met	Arg	Glu	Val	Thr	Asp	Ser	Pro	Gly	Arg	Pro	Arg	Glu	Leu	Thr
	50					55					60				
Ile	Pro	Gln	Thr	Ser	Ser	His	Gly	Ala	Asn	Arg	Phe	Val			
65					70				75						

<210> 362

<211> 244

<212> DNA

<213> Homo sapiens

<400> 362

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60

120
180
240
244

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<400> 363
Met Trp Gln Pro Leu Phe Phe Lys Trp Leu Leu Ser Cys Cys Pro Gly
          5              10              15
Ser Ser Gln Ile
          20

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<400> 364
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<400> 365
Gly Ser Ser Gln Ile Ala Ala Ala Ala Ser Thr Gln Pro Glu Asp Asp
                    5              10              15
Ile Asn Thr Gln
              20

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<400> 366
gggagttctc aaattgctgc agcagcctcc acccagcctg aggatgacat caatacacag 60

<400> 367
Lys Pro Gly His Trp Thr Tyr Thr Leu Asn Asn Thr His His Ser Leu
 5 10 15
Gln Ala Leu Lys

20

<210> 368
 <211> 2343
 <212> DNA
 <213> Homo sapiens

<400> 368

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gcgccgcgcc	tctgaggcgc	agcatgtgaa	gcggagacgg	catccagtgg	ggggcgagcc	180
tctcagccgg	ccgggatggc	taccacggcc	gagctcttcg	aggagccttt	tgtggcagat	240
gaatatattg	aacgtcttgt	atggagaacc	ccaggaggag	gctctagagg	tggacctgaa	300
gcttttgatc	ctaaaagatt	attagaagaa	tttgtaaata	atattcagga	actccagata	360
atggatgaaa	ggattcagag	gaaagtagag	aaactagagc	aacaatgtca	gaaagaagcc	420
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ttccaagaac	tagatgagca	cattagctat	gtagcaacta	aagtctgtca	ccttggagac	540
cagttagagg	gggtaaacac	acccagacaa	cgggcagtg	aggctcagaa	attgatgaaa	600
tactttaatg	agtttctaga	tggagaattg	aaatctgatg	tttttcaaaa	ttctgaaaag	660
ataaaggaag	cagcagacat	cattcagaag	ttgcacctaa	ttgccaaga	gttacctttt	720
gatagatttt	cagaagttaa	atccaaaatt	gcaagtaaat	accatgattt	agaatgccag	780
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gcagcagttt	tacttcattt	taagggttat	tccattgtg	ttgatgttta	tataaagcag	900
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aggaagtcgg	atgcagagca	atatctcaaa	aatctctatg	atctgtatac	aagaaccacc	1140
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gggaagaatg	tgatacag	tttgatggaa	cttggaagtac	gttttcatcg	acttatctat	2040
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gccgaatata	ggaagtgtgc	caaagacttc	aagattccaa	tggtattaca	tctttttgat	2160
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tcaggagaac	aacttgctaa	tctggacaag	aatatacttc	actccttcgt	acaacttcgt	2280
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att						2343

<210> 369
 <211> 708
 <212> PRT
 <213> Homo sapiens

Met	Ala	Thr	Thr	Ala	Glu	Leu	Phe	Glu	Glu	Pro	Phe	Val	Ala	Asp	Glu
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Tyr	Ile	Glu	Arg	Leu	Val	Trp	Arg	Thr	Pro	Gly	Gly	Gly	Ser	Arg	Gly
			20					25					30		
Gly	Pro	Glu	Ala	Phe	Asp	Pro	Lys	Arg	Leu	Leu	Glu	Glu	Phe	Val	Asn
		35					40					45			
His	Ile	Gln	Glu	Leu	Gln	Ile	Met	Asp	Glu	Arg	Ile	Gln	Arg	Lys	Val
	50					55					60				
Glu	Lys	Leu	Glu	Gln	Gln	Cys	Gln	Lys	Glu	Ala	Lys	Glu	Phe	Ala	Lys
65					70					75					80
Lys	Val	Gln	Glu	Leu	Gln	Lys	Ser	Asn	Gln	Val	Ala	Phe	Gln	His	Phe
				85					90					95	
Gln	Glu	Leu	Asp	Glu	His	Ile	Ser	Tyr	Val	Ala	Thr	Lys	Val	Cys	His
			100					105					110		
Leu	Gly	Asp	Gln	Leu	Glu	Gly	Val	Asn	Thr	Pro	Arg	Gln	Arg	Ala	Val
		115					120					125			
Glu	Ala	Gln	Lys	Leu	Met	Lys	Tyr	Phe	Asn	Glu	Phe	Leu	Asp	Gly	Glu
	130					135					140				
Leu	Lys	Ser	Asp	Val	Phe	Thr	Asn	Ser	Glu	Lys	Ile	Lys	Glu	Ala	Ala
145					150					155					160
Asp	Ile	Ile	Gln	Lys	Leu	His	Leu	Ile	Ala	Gln	Glu	Leu	Pro	Phe	Asp
				165					170					175	
Arg	Phe	Ser	Glu	Val	Lys	Ser	Lys	Ile	Ala	Ser	Lys	Tyr	His	Asp	Leu
			180					185					190		
Glu	Cys	Gln	Leu	Ile	Gln	Glu	Phe	Thr	Ser	Ala	Gln	Arg	Arg	Gly	Glu
		195					200					205			
Ile	Ser	Arg	Met	Arg	Glu	Val	Ala	Ala	Val	Leu	Leu	His	Phe	Lys	Gly
	210					215						220			
Tyr	Ser	His	Cys	Val	Asp	Val	Tyr	Ile	Lys	Gln	Cys	Gln	Glu	Gly	Ala
225					230					235					240
Tyr	Leu	Arg	Asn	Asp	Ile	Phe	Glu	Asp	Ala	Gly	Ile	Leu	Cys	Gln	Arg
				245					250					255	
Val	Asn	Lys	Gln	Val	Gly	Asp	Ile	Phe	Ser	Asn	Pro	Glu	Thr	Val	Leu
			260					265					270		
Ala	Lys	Leu	Ile	Gln	Asn	Val	Phe	Glu	Ile	Lys	Leu	Gln	Ser	Phe	Val
		275					280					285			
Lys	Glu	Gln	Leu	Glu	Glu	Cys	Arg	Lys	Ser	Asp	Ala	Glu	Gln	Tyr	Leu
		290				295					300				
Lys	Asn	Leu	Tyr	Asp	Leu	Tyr	Thr	Arg	Thr	Thr	Asn	Leu	Ser	Ser	Lys
305					310					315					320
Leu	Met	Glu	Phe	Asn	Leu	Gly	Thr	Asp	Lys	Gln	Thr	Phe	Leu	Ser	Lys
				325					330					335	
Leu	Ile	Lys	Ser	Ile	Phe	Ile	Ser	Tyr	Leu	Glu	Asn	Tyr	Ile	Glu	Val
			340					345					350		
G															

Val Asn Leu Leu Gln Glu Thr Lys Gln Ala Phe Glu Arg Cys His Arg
 420 425 430
 Leu Ser Asp Pro Ser Asp Leu Pro Arg Asn Ala Phe Arg Ile Phe Thr
 435 440 445
 Ile Leu Val Glu Phe Leu Cys Ile Glu His Ile Asp Tyr Ala Leu Glu
 450 455 460
 Thr Gly Leu Ala Gly Ile Pro Ser Ser Asp Ser Arg Asn Ala Asn Leu
 465 470 475 480
 Tyr Phe Leu Asp Val Val Gln Gln Ala Asn Thr Ile Phe His Leu Phe
 485 490 495
 Asp Lys Gln Phe Asn Asp His Leu Met Pro Leu Ile Ser Ser Ser Pro
 500 505 510
 Lys Leu Ser Glu Cys Leu Gln Lys Lys Lys Glu Ile Ile Glu Gln Met
 515 520 525
 Glu Met Lys Leu Asp Thr Gly Ile Asp Arg Thr Leu Asn Cys Met Ile
 530 535 540
 Gly Gln Met Lys His Ile Leu Ala Ala Glu Gln Lys Lys Thr Asp Phe
 545 550 555 560
 Lys Pro Glu Asp Glu Asn Asn Val Leu Ile Gln Tyr Thr Asn Ala Cys
 565 570 575
 Val Lys Val Cys Ala Tyr Val Arg Lys Gln Val Glu Lys Ile Lys Asn
 580 585 590
 Ser Met Asp Gly Lys Asn Val Asp Thr Val Leu Met Glu Leu Gly Val
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 625 630 635 640
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 Leu His Ala Leu Cys Asn Leu Leu Val Val Ala Pro Asp Asn Leu Lys
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 Gln Val Cys Ser Gly Glu Gln Leu Ala Asn Leu Asp Lys Asn Ile Leu
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[illegible]